

ANALYTICAL REPORT

Job Number: 280-69513-1

Job Description: GSI - McConnell Air Force Base, Kansas

For:

GSI Environmental, Inc
9600 Great Hills Trail, Ste 350E
Austin, TX 78759

Attention: Anna Zabierek



Approved for release.
Elaine M Walker
Project Manager II
7/1/2015 12:16 PM

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07/01/2015
Revision: 1

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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CASE NARRATIVE
Client: GSI Environmental, Inc
Project: GSI - McConnell Air Force Base, Kansas
Report Number: 280-69513-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

REVISION 1: JULY 1, 2015

This revision was required in order to add a missing ICV for 8260B VOCs. ICV 280-279265/22 was initially not included in the original report and this information has now been added. There are no changes to the data or the EDDs.

RECEIPT

Six samples were received on 05/20/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

The Chain of Custody requests that sample samples 54400-MW53D-0515 (280-69513-2) and 54400-MW53S-0515 (280-69513-3) be analyzed on a rush turnaround time. Due to current laboratory capacity, the fastest turnaround time that TA Denver is able to provide for the requested analyses is 10 business days.

The rush VOC analysis for samples 54400-MW53D-0515 (280-69513-2) and 54400-MW53S-0515 (280-69513-3) are reported with a Level II report under SDG 280-69513-2 on a 10 business day turnaround time. For the final deliverables, these samples will be combined with the remaining samples in this SDG on a standard 15 business day turnaround time.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples 54403-TB17-0515 (280-69513-1), 54400-MW53D-0515 (280-69513-2), 54400-MW53S-0515 (280-69513-3) and 54402-EB17-0515 (280-69513-4) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 05/29/2015.

Methylene Chloride was detected in method blank MB 280-279458/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 54400-IDW01-0515 (280-69513-5) and 54400-IDW02-0515 (280-69513-6) were analyzed for TCLP volatile organic compounds (GC-MS) in accordance with 1311. The samples were leached on 05/22/2015 and analyzed on 06/03/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP METALS

Samples 54400-IDW01-0515 (280-69513-5) and 54400-IDW02-0515 (280-69513-6) were analyzed for TCLP metals in accordance with EPA SW846 Methods 1311/6010C. The samples were leached on 05/20/2015, prepared on 05/28/2015 and analyzed on 05/29/2015, 05/30/2015 and 06/01/2015.

Barium and Lead were detected in method blank LB 280-278466/1-F at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". However, because the results concentrations were less than ½ the respective reporting limit, no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP MERCURY

Samples 54400-IDW01-0515 (280-69513-5) and 54400-IDW02-0515 (280-69513-6) were analyzed for TCLP mercury in accordance with SW-846 1311/7470. The samples were leached on 05/20/2015, and prepared and analyzed on 05/26/2015.

Mercury failed the recovery criteria high for LCS 280-278466/2-E. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported and flagged "Q".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

IGNITABILITY

Samples 54400-IDW01-0515 (280-69513-5) and 54400-IDW02-0515 (280-69513-6) were analyzed for Ignitability in accordance with EPA SW-846 Method 7.1.2. The samples were analyzed on 05/27/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

pH (CORROSIVITY)

Samples 54400-IDW01-0515 (280-69513-5) and 54400-IDW02-0515 (280-69513-6) were analyzed for pH (corrosivity) in accordance with EPA SW-846 Method 9045D. The samples were leached on 05/29/2015 and analyzed on 05/30/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Instrument ID: VMS_H

Analysis Batch Number: 279265

Lab Sample ID: IC 280-279265/9

Client Sample ID:

Date Analyzed: 05/28/15 00:18

Lab File ID: H2949.D

GC Column: DB-624 (75.53) ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trichlorobenzene	16.08	Assign Peak	moanm	06/02/15 08:03
1,2,3-Trichlorobenzene	16.53	Assign Peak	moanm	06/02/15 08:03

Lab Sample ID: IC 280-279265/10

Client Sample ID:

Date Analyzed: 05/28/15 00:40

Lab File ID: H2950.D

GC Column: DB-624 (75.53) ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.25	Baseline	wickhamt	05/28/15 06:21
1,2,4-Trichlorobenzene	16.08	Assign Peak	moanm	06/02/15 08:03
1,2,3-Trichlorobenzene	16.53	Assign Peak	moanm	06/02/15 08:03

Lab Sample ID: IC 280-279265/11

Client Sample ID:

Date Analyzed: 05/28/15 01:03

Lab File ID: H2951.D

GC Column: DB-624 (75.53) ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.25	Shouldering	wickhamt	05/28/15 06:22
1,2,4-Trichlorobenzene	16.07	Assign Peak	moanm	06/02/15 08:04
1,2,3-Trichlorobenzene	16.52	Assign Peak	moanm	06/02/15 08:04

Lab Sample ID: IC 280-279265/12

Client Sample ID:

Date Analyzed: 05/28/15 01:25

Lab File ID: H2952.D

GC Column: DB-624 (75.53) ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trichlorobenzene	16.09	Assign Peak	moanm	06/02/15 08:04
1,2,3-Trichlorobenzene	16.54	Assign Peak	moanm	06/02/15 08:04

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Instrument ID: VMS_H

Analysis Batch Number: 279265

Lab Sample ID: IC 280-279265/13

Client Sample ID: _____

Date Analyzed: 05/28/15 01:48

Lab File ID: H2953.D

GC Column: DB-624 (75.53 ID: 0.53 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trichlorobenzene	16.07	Assign Peak	moanm	06/02/15 08:04
1,2,3-Trichlorobenzene	16.53	Assign Peak	moanm	06/02/15 08:04

Lab Sample ID: IC 280-279265/14

Client Sample ID: _____

Date Analyzed: 05/28/15 02:10

Lab File ID: H2954.D

GC Column: DB-624 (75.53 ID: 0.53 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trichlorobenzene	16.09	Assign Peak	moanm	06/02/15 08:04
1,2,3-Trichlorobenzene	16.54	Assign Peak	moanm	06/02/15 08:04

Lab Sample ID: IC 280-279265/15

Client Sample ID: _____

Date Analyzed: 05/28/15 02:33

Lab File ID: H2955.D

GC Column: DB-624 (75.53 ID: 0.53 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trichlorobenzene	16.08	Assign Peak	moanm	06/02/15 08:05
1,2,3-Trichlorobenzene	16.53	Assign Peak	moanm	06/02/15 08:05

Lab Sample ID: ICV 280-279265/22

Client Sample ID: _____

Date Analyzed: 05/28/15 02:55

Lab File ID: H2956.D

GC Column: DB-624 (75.53 ID: 0.53 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trichlorobenzene	16.09	Assign Peak	moanm	06/02/15 08:07
1,2,3-Trichlorobenzene	16.54	Assign Peak	moanm	06/02/15 08:07

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.: _____

Instrument ID: VMS_H Analysis Batch Number: 279265Lab Sample ID: IC 280-279265/16 Client Sample ID: _____Date Analyzed: 05/28/15 03:18 Lab File ID: H2957.D GC Column: DB-624 (75.53 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.80	Split Peak	wickhamt	05/28/15 06:50

Lab Sample ID: IC 280-279265/17 Client Sample ID: _____Date Analyzed: 05/28/15 03:40 Lab File ID: H2958.D GC Column: DB-624 (75.53 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	3.17	Shouldering	wickhamt	05/28/15 06:52
Acetonitrile	3.85	Split Peak	wickhamt	05/28/15 06:50

Lab Sample ID: IC 280-279265/18 Client Sample ID: _____Date Analyzed: 05/28/15 04:03 Lab File ID: H2959.D GC Column: DB-624 (75.53 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	3.19	Shouldering	wickhamt	05/28/15 06:52

Lab Sample ID: IC 280-279265/20 Client Sample ID: _____Date Analyzed: 05/28/15 04:48 Lab File ID: H2961.D GC Column: DB-624 (75.53 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	3.63	Assign Peak	wickhamt	05/28/15 06:49

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.: _____

Instrument ID: VMS_HAnalysis Batch Number: 279458Lab Sample ID: CCV 280-279458/3

Client Sample ID: _____

Date Analyzed: 05/28/15 19:39Lab File ID: H2999.DGC Column: DB-624 (75.53 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	3.63	Assign Peak	bergerb	05/28/15 20:12
4-Bromofluorobenzene (Surr)	12.77	Split Peak	bergerb	05/28/15 20:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.: _____

Instrument ID: VMS_PAnalysis Batch Number: 277770Lab Sample ID: IC 280-277770/18

Client Sample ID: _____

Date Analyzed: 05/16/15 14:51Lab File ID: P4182.DGC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	7.77	Split Peak	seifertj	05/18/15 10:53

Lab Sample ID: IC 280-277770/19

Client Sample ID: _____

Date Analyzed: 05/16/15 15:11Lab File ID: P4183.DGC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	5.80	Split Peak	seifertj	05/18/15 10:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 279915Lab Sample ID: STD003 280-279915/12 IC Client Sample ID: _____Date Analyzed: 06/02/15 12:15 Lab File ID: P4781.D GC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	5.10	Split Peak	seifertj	06/02/15 13:03
1,2-Dichloroethane	7.59	Assign Peak	seifertj	06/02/15 13:03

Lab Sample ID: STD020 280-279915/14 IC Client Sample ID: _____Date Analyzed: 06/02/15 12:55 Lab File ID: P4783.D GC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	5.87	Split Peak	seifertj	06/02/15 13:39

Lab Sample ID: STD050 280-279915/15 IC Client Sample ID: _____Date Analyzed: 06/02/15 13:14 Lab File ID: P4784.D GC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	5.85	Split Peak	seifertj	06/02/15 13:41

Lab Sample ID: STD60 280-279915/18 IC Client Sample ID: _____Date Analyzed: 06/02/15 14:13 Lab File ID: P4787.D GC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	5.84	Split Peak	seifertj	06/02/15 14:48
m-Xylene & p-Xylene	10.16	Wrong peak	seifertj	06/02/15 16:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.: _____

Instrument ID: VMS_PAnalysis Batch Number: 280068Lab Sample ID: CCV 280-280068/2

Client Sample ID: _____

Date Analyzed: 06/02/15 22:41Lab File ID: P4810.DGC Column: DB-624 (60.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	5.84	Split Peak	contreras e	06/02/15 23:33

SAMPLE SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-69513-1TB	54403-TB17-0515	Water	05/19/2015 0000	05/20/2015 0810
280-69513-2	54400-MW53D-0515	Water	05/19/2015 0855	05/20/2015 0810
280-69513-3	54400-MW53S-0515	Water	05/19/2015 1150	05/20/2015 0810
280-69513-4EB	54402-EB17-0515	Water	05/19/2015 1650	05/20/2015 0810
280-69513-5	54400-IDW01-0515	Solid	05/19/2015 1630	05/20/2015 0810
280-69513-6	54400-IDW02-0515	Solid	05/19/2015 1635	05/20/2015 0810

EXECUTIVE SUMMARY - Detections

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-69513-2 54400-MW53D-0515						
1,1-Dichloroethene		3.0		1.0	ug/L	8260B
Carbon tetrachloride		1.4	J	2.0	ug/L	8260B
Chloroform		0.25	J	1.0	ug/L	8260B
Trichloroethene		1.6		1.0	ug/L	8260B
280-69513-3 54400-MW53S-0515						
1,1-Dichloroethene		2.9		1.0	ug/L	8260B
Carbon tetrachloride		1.1	J	2.0	ug/L	8260B
Chloroform		0.22	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.33	J	1.0	ug/L	8260B
Trichloroethene		14		1.0	ug/L	8260B
280-69513-5 54400-IDW01-0515						
Ignitability		NO			No Unit	7.1.2
TCLP						
Barium		2.0		1.0	mg/L	6010C
Chromium		0.0032	J	0.50	mg/L	6010C
Lead		0.26	J	0.50	mg/L	6010C
Soluble						
pH adj. to 25 deg C-Soluble		8.54		0.100	SU	9045D
280-69513-6 54400-IDW02-0515						
Ignitability		NO			No Unit	7.1.2
TCLP						
Barium		2.0		1.0	mg/L	6010C
Cadmium		0.0053	J	0.10	mg/L	6010C
Chromium		0.0036	J	0.50	mg/L	6010C
Lead		0.057	J	0.50	mg/L	6010C
Soluble						
pH adj. to 25 deg C-Soluble		8.48		0.100	SU	9045D

METHOD SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
TCLP Extraction	TAL DEN		SW846 1311
Purge and Trap	TAL DEN		SW846 5030B
Metals (ICP)	TAL DEN	SW846 6010C	
TCLP Extraction	TAL DEN		SW846 1311
Preparation, Total Metals	TAL DEN		SW846 3010A
Mercury (CVAA)	TAL DEN	SW846 7470A	
TCLP Extraction	TAL DEN		SW846 1311
Preparation, Mercury	TAL DEN		SW846 7470A
Ignitability, Solids	TAL DEN	SW846 7.1.2	
pH	TAL DEN	SW846 9045D	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Method	Analyst	Analyst ID
SW846 8260B	Berger, Brent B	BBB
SW846 8260B	Contreras, Evan	EMC
SW846 6010C	Broander, Laura L	LLB
SW846 6010C	Rhoades, Chris R	CRR
SW846 7470A	Grisdale, Christopher G	CGG
SW846 7.1.2	Woolley, Mark -	MW1
SW846 9045D	Simons, Nicole A	NAS

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54403-TB17-0515

Lab Sample ID: 280-69513-1TB
Client Matrix: Water

Date Sampled: 05/19/2015 0000
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3011.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0011			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0011				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54403-TB17-0515

Lab Sample ID: 280-69513-1TB
Client Matrix: Water

Date Sampled: 05/19/2015 0000
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3011.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0011			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0011				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		81 - 118	
4-Bromofluorobenzene (Surr)	101		85 - 114	
Dibromofluoromethane (Surr)	100		80 - 119	
Toluene-d8 (Surr)	96		89 - 112	

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: **54400-MW53D-0515**

Lab Sample ID: 280-69513-2
Client Matrix: Water

Date Sampled: 05/19/2015 0855
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3012.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0034			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0034				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	3.0		0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	1.4	J	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.25	J	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: **54400-MW53D-0515**

Lab Sample ID: 280-69513-2
Client Matrix: Water

Date Sampled: 05/19/2015 0855
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3012.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0034			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0034				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	1.6		0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	91		81 - 118	
4-Bromofluorobenzene (Surr)	100		85 - 114	
Dibromofluoromethane (Surr)	98		80 - 119	
Toluene-d8 (Surr)	99		89 - 112	

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: **54400-MW53S-0515**

Lab Sample ID: 280-69513-3
Client Matrix: Water

Date Sampled: 05/19/2015 1150
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3013.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0056			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0056				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	2.9		0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	1.1	J	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.22	J	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.33	J	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: **54400-MW53S-0515**

Lab Sample ID: 280-69513-3
Client Matrix: Water

Date Sampled: 05/19/2015 1150
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3013.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0056			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0056				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	14		0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		81 - 118	
4-Bromofluorobenzene (Surr)	100		85 - 114	
Dibromofluoromethane (Surr)	98		80 - 119	
Toluene-d8 (Surr)	98		89 - 112	

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54402-EB17-0515

Lab Sample ID: 280-69513-4EB
Client Matrix: Water

Date Sampled: 05/19/2015 1650
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3014.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0119			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0119				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54402-EB17-0515

Lab Sample ID: 280-69513-4EB
Client Matrix: Water

Date Sampled: 05/19/2015 1650
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3014.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/29/2015 0119			Final Weight/Volume:	20 mL
Prep Date:	05/29/2015 0119				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	93		81 - 118	
4-Bromofluorobenzene (Surr)	100		85 - 114	
Dibromofluoromethane (Surr)	99		80 - 119	
Toluene-d8 (Surr)	98		89 - 112	

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5
Client Matrix: Solid

Date Sampled: 05/19/2015 1630
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)-TCLP

Analysis Method:	8260B	Analysis Batch:	280-280068	Instrument ID:	VMS_P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P4816.D
Dilution:	1.0	Leach Batch:	280-278801	Initial Weight/Volume:	2 mL
Analysis Date:	06/03/2015 0040			Final Weight/Volume:	20 mL
Prep Date:	06/03/2015 0040				
Leach Date:	05/22/2015 1533				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Benzene		0.0040	U	0.0016	0.010
2-Butanone (MEK)		0.040	U	0.018	0.10
Carbon tetrachloride		0.0040	U	0.0019	0.010
Chlorobenzene		0.0040	U	0.0017	0.010
Chloroform		0.0040	U	0.0016	0.010
1,2-Dichloroethane		0.0040	U	0.0013	0.010
1,1-Dichloroethene		0.0080	U	0.0023	0.010
Tetrachloroethene		0.0040	U	0.0020	0.010
Trichloroethene		0.0040	U	0.0016	0.010
Vinyl chloride		0.0020	U	0.0010	0.010
Surrogate		%Rec	Qualifier	Acceptance Limits	
Toluene-d8 (Surr)		109		78 - 120	
1,2-Dichloroethane-d4 (Surr)		115		64 - 129	
4-Bromofluorobenzene (Surr)		101		78 - 121	
Dibromofluoromethane (Surr)		114		79 - 119	

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: **54400-IDW02-0515**

Lab Sample ID: 280-69513-6
Client Matrix: Solid

Date Sampled: 05/19/2015 1635
Date Received: 05/20/2015 0810

8260B Volatile Organic Compounds (GC/MS)-TCLP

Analysis Method:	8260B	Analysis Batch:	280-280068	Instrument ID:	VMS_P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P4822.D
Dilution:	1.0	Leach Batch:	280-278801	Initial Weight/Volume:	2 mL
Analysis Date:	06/03/2015 0237			Final Weight/Volume:	20 mL
Prep Date:	06/03/2015 0237				
Leach Date:	05/22/2015 1533				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Benzene		0.0040	U	0.0016	0.010
2-Butanone (MEK)		0.040	U	0.018	0.10
Carbon tetrachloride		0.0040	U	0.0019	0.010
Chlorobenzene		0.0040	U	0.0017	0.010
Chloroform		0.0040	U	0.0016	0.010
1,2-Dichloroethane		0.0040	U	0.0013	0.010
1,1-Dichloroethene		0.0080	U	0.0023	0.010
Tetrachloroethene		0.0040	U	0.0020	0.010
Trichloroethene		0.0040	U	0.0016	0.010
Vinyl chloride		0.0020	U	0.0010	0.010
Surrogate		%Rec	Qualifier	Acceptance Limits	
Toluene-d8 (Surr)		110		78 - 120	
1,2-Dichloroethane-d4 (Surr)		108		64 - 129	
4-Bromofluorobenzene (Surr)		100		78 - 121	
Dibromofluoromethane (Surr)		108		79 - 119	

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5
Client Matrix: Solid

Date Sampled: 05/19/2015 1630
Date Received: 05/20/2015 0810

6010C Metals (ICP)-TCLP

Analysis Method:	6010C	Analysis Batch:	280-279481	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0048			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Barium		2.0		0.0020	1.0
Cadmium		0.0090	U	0.0020	0.10
Chromium		0.0032	J	0.0030	0.50
Silver		0.018	U	0.0040	0.50

Analysis Method:	6010C	Analysis Batch:	280-279689	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1442			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Lead		0.26	J	0.013	0.50
Selenium		0.095	U	0.024	0.10

Analysis Method:	6010C	Analysis Batch:	280-279916	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1142			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Arsenic		0.075	U	0.022	0.50

7470A Mercury (CVAA)-TCLP

Analysis Method:	7470A	Analysis Batch:	280-279184	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-278942	Lab File ID:	150526bb.txt
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	30 mL
Analysis Date:	05/26/2015 1814			Final Weight/Volume:	30 mL
Prep Date:	05/26/2015 1100				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Mercury		0.000080	U Q	0.000030	0.0020

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Client Sample ID: 54400-IDW02-0515

Lab Sample ID: 280-69513-6
Client Matrix: Solid

Date Sampled: 05/19/2015 1635
Date Received: 05/20/2015 0810

6010C Metals (ICP)-TCLP

Analysis Method:	6010C	Analysis Batch:	280-279481	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0051			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Barium		2.0		0.0020	1.0
Cadmium		0.0053	J	0.0020	0.10
Chromium		0.0036	J	0.0030	0.50
Silver		0.018	U	0.0040	0.50

Analysis Method:	6010C	Analysis Batch:	280-279689	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1445			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Lead		0.057	J	0.013	0.50
Selenium		0.095	U	0.024	0.10

Analysis Method:	6010C	Analysis Batch:	280-279916	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1144			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Arsenic		0.075	U	0.022	0.50

7470A Mercury (CVAA)-TCLP

Analysis Method:	7470A	Analysis Batch:	280-279184	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-278942	Lab File ID:	150526bb.txt
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	30 mL
Analysis Date:	05/26/2015 1816			Final Weight/Volume:	30 mL
Prep Date:	05/26/2015 1100				
Leach Date:	05/20/2015 1802				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	DL	LOQ
Mercury		0.000080	U Q	0.000030	0.0020

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

General Chemistry

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5 Date Sampled: 05/19/2015 1630
Client Matrix: Solid Date Received: 05/20/2015 0810

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Ignitability	NO		No Unit			1.0	7.1.2
							DryWt Corrected: N
pH adj. to 25 deg C-Soluble	8.54	SU	0.100	0.100		1.0	9045D
							DryWt Corrected: N

Analysis Batch: 280-279256 Analysis Date: 05/27/2015 2048
Analysis Batch: 280-279661 Analysis Date: 05/30/2015 1124

Analytical Data

Client: GSI Environmental, Inc

Job Number: 280-69513-1

General Chemistry

Client Sample ID: 54400-IDW02-0515

Lab Sample ID: 280-69513-6 Date Sampled: 05/19/2015 1635
Client Matrix: Solid Date Received: 05/20/2015 0810

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Ignitability	NO		No Unit			1.0	7.1.2
							DryWt Corrected: N
pH adj. to 25 deg C-Soluble	8.48	SU	0.100	0.100		1.0	9045D
							DryWt Corrected: N

Analysis Batch: 280-279256 Analysis Date: 05/27/2015 2048
Analysis Batch: 280-279661 Analysis Date: 05/30/2015 1124

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-69513-5	54400-IDW01-0515	114	115	109	101
280-69513-6	54400-IDW02-0515	108	108	110	100
LB 280-278801/1-A		107	108	105	95
LCS 280-278801/2-A		107	104	105	94

Surrogate

Acceptance Limits

DBFM = Dibromofluoromethane (Surr)	79-119
DCA = 1,2-Dichloroethane-d4 (Surr)	64-129
TOL = Toluene-d8 (Surr)	78-120
BFB = 4-Bromofluorobenzene (Surr)	78-121

Surrogate Recovery Report**8260B Volatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-69513-1	54403-TB17-0515	100	95	96	101
280-69513-2	54400-MW53D-0515	98	91	99	100
280-69513-3	54400-MW53S-0515	98	95	98	100
280-69513-4	54402-EB17-0515	99	93	98	100
MB 280-279458/6		98	95	100	101
LCS 280-279458/4		96	97	104	102

Surrogate**Acceptance Limits**

DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Method Blank - Batch: 280-279458

Method: 8260B Preparation: 5030B

Lab Sample ID:	MB 280-279458/6	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H3003.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/28/2015 2110	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/28/2015 2110				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Method Blank - Batch: 280-279458

Method: 8260B Preparation: 5030B

Lab Sample ID:	MB 280-279458/6	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H3003.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/28/2015 2110	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/28/2015 2110				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Hexachlorobutadiene	0.80	U	0.36	1.0
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.661	J	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5
<hr/>				
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		81 - 118	
4-Bromofluorobenzene (Surr)	101		85 - 114	
Dibromofluoromethane (Surr)	98		80 - 119	
Toluene-d8 (Surr)	100		89 - 112	

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Control Sample - Batch: 280-279458

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-279458/4	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H3001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/28/2015 2025	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/28/2015 2025				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	5.00	5.08	102	78 - 124	
1,1,1-Trichloroethane	5.00	4.84	97	74 - 131	
1,1,2,2-Tetrachloroethane	5.00	4.78	96	71 - 121	
1,1,2-Trichloroethane	5.00	4.98	100	80 - 119	
1,1-Dichloroethane	5.00	4.83	97	77 - 125	
1,1-Dichloropropene	5.00	4.98	100	79 - 125	
1,1-Dichloroethene	5.00	4.75	95	71 - 131	
1,2,3-Trichlorobenzene	5.00	5.19	104	69 - 129	
1,2,3-Trichloropropane	5.00	4.77	95	73 - 122	
1,2,4-Trichlorobenzene	5.00	5.11	102	69 - 130	
1,2,4-Trimethylbenzene	5.00	4.72	94	76 - 124	
1,2-Dibromo-3-Chloropropane	5.00	5.13	103	62 - 128	
1,2-Dibromoethane	5.00	5.07	101	77 - 121	
1,2-Dichlorobenzene	5.00	5.01	100	80 - 119	
1,2-Dichloroethane	5.00	4.89	98	73 - 128	
1,2-Dichloropropane	5.00	4.80	96	78 - 122	
1,3,5-Trimethylbenzene	5.00	4.81	96	75 - 124	
1,3-Dichlorobenzene	5.00	4.58	92	80 - 119	
1,3-Dichloropropane	5.00	4.84	97	80 - 119	
1,4-Dichlorobenzene	5.00	5.17	103	79 - 118	
2,2-Dichloropropane	5.00	4.78	96	60 - 139	
2-Butanone (MEK)	20.0	21.0	105	56 - 143	
2-Chlorotoluene	5.00	4.74	95	79 - 122	
2-Hexanone	20.0	20.9	105	57 - 139	
4-Chlorotoluene	5.00	4.93	99	78 - 122	
4-Methyl-2-pentanone (MIBK)	20.0	21.6	108	67 - 130	
Acetone	20.0	18.1	90	39 - 160	
Benzene	5.00	5.00	100	79 - 120	
Bromobenzene	5.00	4.86	97	80 - 120	
Bromochloromethane	5.00	4.96	99	78 - 123	
Bromodichloromethane	5.00	4.89	98	79 - 125	
Bromoform	5.00	5.18	104	66 - 130	
Bromomethane	5.00	5.40	108	53 - 141	
Carbon disulfide	5.00	4.62	92	64 - 133	
Carbon tetrachloride	5.00	4.83	97	72 - 136	
Chlorobenzene	5.00	5.02	100	82 - 118	
Chlorodibromomethane	5.00	5.15	103	74 - 126	
Chloroethane	5.00	5.36	107	60 - 138	
Chloroform	5.00	4.88	98	79 - 124	
Chloromethane	5.00	5.32	106	50 - 139	
cis-1,2-Dichloroethene	5.00	4.80	96	78 - 123	
cis-1,3-Dichloropropene	5.00	5.19	104	75 - 124	
Dibromomethane	5.00	4.73	95	79 - 123	
Dichlorodifluoromethane	5.00	5.86	117	32 - 152	
Ethylbenzene	5.00	4.91	98	79 - 121	
Hexachlorobutadiene	5.00	4.97	99	66 - 134	

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Control Sample - Batch: 280-279458

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-279458/4	Analysis Batch:	280-279458	Instrument ID:	VMS_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H3001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/28/2015 2025	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/28/2015 2025				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Isopropylbenzene	5.00	4.83	97	72 - 131	
Methyl tert-butyl ether	5.00	5.03	101	71 - 124	
Methylene Chloride	5.00	5.93	119	74 - 124	
m-Xylene & p-Xylene	5.00	5.11	102	80 - 121	
Naphthalene	5.00	5.09	102	61 - 128	
n-Butylbenzene	5.00	4.76	95	75 - 128	
N-Propylbenzene	5.00	4.79	96	76 - 126	
o-Xylene	5.00	4.95	99	78 - 122	
p-Isopropyltoluene	5.00	4.92	98	77 - 127	
sec-Butylbenzene	5.00	4.73	95	77 - 126	
Styrene	5.00	4.91	98	78 - 123	
tert-Butyl alcohol	50.0	54.5	109	68 - 129	
tert-Butylbenzene	5.00	4.75	95	78 - 124	
Tetrachloroethene	5.00	5.00	100	74 - 129	
Toluene	5.00	4.90	98	80 - 121	
trans-1,2-Dichloroethene	5.00	4.84	97	75 - 124	
trans-1,3-Dichloropropene	5.00	5.20	104	73 - 127	
Trichloroethene	5.00	5.05	101	79 - 123	
Trichlorofluoromethane	5.00	5.50	110	65 - 141	
Vinyl chloride	5.00	5.41	108	58 - 137	
Surrogate		% Rec	Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)		97	81 - 118		
4-Bromofluorobenzene (Surr)		102	85 - 114		
Dibromofluoromethane (Surr)		96	80 - 119		
Toluene-d8 (Surr)		104	89 - 112		

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

TCLP SPLPE Leachate Blank - Batch: 280-280068

Method: 8260B

Preparation: 5030B

TCLP

Lab Sample ID:	LB 280-278801/1-A	Analysis Batch:	280-280068	Instrument ID:	VMS_P
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	P4813.D
Dilution:	1.0	Leach Batch:	280-278801	Initial Weight/Volume:	20 mL
Analysis Date:	06/02/2015 2341	Units:	mg/L	Final Weight/Volume:	20 mL
Prep Date:	06/02/2015 2341				
Leach Date:	05/22/2015 1533				

Analyte	Result	Qual	DL	LOQ
1,1-Dichloroethene	0.00080	U	0.00023	0.0010
1,2-Dichloroethane	0.00040	U	0.00013	0.0010
2-Butanone (MEK)	0.0040	U	0.0018	0.010
Benzene	0.00040	U	0.00016	0.0010
Carbon tetrachloride	0.00040	U	0.00019	0.0010
Chlorobenzene	0.00040	U	0.00017	0.0010
Chloroform	0.00040	U	0.00016	0.0010
Tetrachloroethene	0.00040	U	0.00020	0.0010
Trichloroethene	0.00040	U	0.00016	0.0010
Vinyl chloride	0.00020	U	0.00010	0.0010
Surrogate		% Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	108		64 - 129	
4-Bromofluorobenzene (Surr)	95		78 - 121	
Dibromofluoromethane (Surr)	107		79 - 119	
Toluene-d8 (Surr)	105		78 - 120	

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Control Sample - Batch: 280-280068

Method: 8260B

Preparation: 5030B

TCLP

Lab Sample ID: LCS 280-278801/2-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 06/02/2015 2322
Prep Date: 06/02/2015 2322
Leach Date: 05/22/2015 1533

Analysis Batch: 280-280068
Prep Batch: N/A
Leach Batch: 280-278801
Units: mg/L

Instrument ID: VMS_P
Lab File ID: P4812.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1-Dichloroethene	0.00500	0.00465	93	71 - 136	
1,2-Dichloroethane	0.00500	0.00482	96	70 - 135	
2-Butanone (MEK)	0.0200	0.0182	91	44 - 150	
Benzene	0.00500	0.00480	96	74 - 135	
Carbon tetrachloride	0.00500	0.00518	104	67 - 135	
Chlorobenzene	0.00500	0.00466	93	76 - 135	
Chloroform	0.00500	0.00491	98	76 - 120	
Tetrachloroethene	0.00500	0.00480	96	70 - 135	
Trichloroethene	0.00500	0.00468	94	73 - 135	
Vinyl chloride	0.00500	0.00476	95	40 - 144	
Surrogate	% Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104			64 - 129	
4-Bromofluorobenzene (Surr)	94			78 - 121	
Dibromofluoromethane (Surr)	107			79 - 119	
Toluene-d8 (Surr)	105			78 - 120	

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

TCLP SPLPE Leachate Blank - Batch: 280-279206

Method: 6010C

Preparation: 3010A

TCLP

Lab Sample ID:	LB 280-278466/1-F	Analysis Batch:	280-279481	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0043	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Result	Qual	DL	LOQ
Barium	0.00385	J	0.0020	1.0
Cadmium	0.0090	U	0.0020	0.10
Chromium	0.013	U	0.0030	0.50
Silver	0.018	U	0.0040	0.50

TCLP SPLPE Leachate Blank - Batch: 280-279206

Method: 6010C

Preparation: 3010A

TCLP

Lab Sample ID:	LB 280-278466/1-F	Analysis Batch:	280-279689	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1437	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Result	Qual	DL	LOQ
Lead	0.102	J	0.013	0.50
Selenium	0.095	U	0.024	0.10

TCLP SPLPE Leachate Blank - Batch: 280-279206

Method: 6010C

Preparation: 3010A

TCLP

Lab Sample ID:	LB 280-278466/1-F	Analysis Batch:	280-279916	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1136	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Result	Qual	DL	LOQ
Arsenic	0.075	U	0.022	0.50

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Control Sample - Batch: 280-279206

Method: 6010C

Preparation: 3010A

TCLP

Lab Sample ID:	LCS 280-278466/2-F	Analysis Batch:	280-279481	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0046	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Barium	12.0	12.1	101	80 - 120	
Cadmium	1.10	1.15	105	80 - 120	
Chromium	5.20	5.13	99	80 - 120	
Silver	1.05	1.08	103	80 - 120	

Lab Control Sample - Batch: 280-279206

Method: 6010C

Preparation: 3010A

TCLP

Lab Sample ID:	LCS 280-278466/2-F	Analysis Batch:	280-279689	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1440	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Lead	5.50	5.68	103	80 - 120	
Selenium	3.00	3.21	107	80 - 120	

Lab Control Sample - Batch: 280-279206

Method: 6010C

Preparation: 3010A

TCLP

Lab Sample ID:	LCS 280-278466/2-F	Analysis Batch:	280-279916	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1139	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	4.00	4.14	104	80 - 120	

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Post Digestion Spike - Batch: 280-279206**Method: 6010C****Preparation: 3010A****TCLP**

Lab Sample ID:	280-69513-6	Analysis Batch:	280-279481	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0102	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Barium	2.0	0.500	2.43	95	80 - 120	
Cadmium	0.0053	J	0.250	99	80 - 120	
Chromium	0.0036	J	0.250	92	80 - 120	J
Silver	0.018	U	0.250	87	80 - 120	J

Post Digestion Spike - Batch: 280-279206**Method: 6010C****Preparation: 3010A****TCLP**

Lab Sample ID:	280-69513-6	Analysis Batch:	280-279689	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1456	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Lead	0.057	J	0.525	94	80 - 120	
Selenium	0.095	U	1.05	105	80 - 120	

Post Digestion Spike - Batch: 280-279206**Method: 6010C****Preparation: 3010A****TCLP**

Lab Sample ID:	280-69513-6	Analysis Batch:	280-279916	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1155	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	0.075	U	1.00	0.981	98	80 - 120

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-279206

**Method: 6010C
Preparation: 3010A
TCLP**

MS Lab Sample ID:	280-69513-6	Analysis Batch:	280-279481	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0056			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

MSD Lab Sample ID:	280-69513-6	Analysis Batch:	280-279481	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0059			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Barium	94	86	80 - 120	7	20		
Cadmium	99	92	80 - 120	7	20		
Chromium	91	86	80 - 120	6	20		
Silver	97	90	80 - 120	7	20		

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-279206

**Method: 6010C
Preparation: 3010A
TCLP**

MS Lab Sample ID:	280-69513-6	Analysis Batch:	280-279689	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1451			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

MSD Lab Sample ID:	280-69513-6	Analysis Batch:	280-279689	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1453			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Lead	95	89	80 - 120	6	20		
Selenium	101	96	80 - 120	6	20		

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-279206

**Method: 6010C
Preparation: 3010A
TCLP**

MS Lab Sample ID:	280-69513-6	Analysis Batch:	280-279916	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1150			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				
MSD Lab Sample ID:	280-69513-6	Analysis Batch:	280-279916	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1152			Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Arsenic	98	94	80 - 120	5	20		

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-279206

MS Lab Sample ID: 280-69513-6
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 05/29/2015 0056
 Prep Date: 05/28/2015 1515
 Leach Date: 05/20/2015 1802

Units: mg/L

**Method: 6010C
Preparation: 3010A
TCLP**

MSD Lab Sample ID: 280-69513-6
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 05/29/2015 0059
 Prep Date: 05/28/2015 1515
 Leach Date: 05/20/2015 1802

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Barium	2.0	12.0	12.0	13.3	12.3
Cadmium	0.0053	J	1.10	1.09	1.02
Chromium	0.0036	J	5.20	4.72	4.45
Silver	0.018	U	1.05	1.01	0.946

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-279206

MS Lab Sample ID: 280-69513-6
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 05/30/2015 1451
 Prep Date: 05/28/2015 1515
 Leach Date: 05/20/2015 1802

Units: mg/L

**Method: 6010C
Preparation: 3010A
TCLP**

MSD Lab Sample ID: 280-69513-6
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 05/30/2015 1453
 Prep Date: 05/28/2015 1515
 Leach Date: 05/20/2015 1802

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Lead	0.057	J	5.50	5.29	4.96
Selenium	0.095	U	3.00	3.04	2.88

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-279206

MS Lab Sample ID: 280-69513-6
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 06/01/2015 1150
 Prep Date: 05/28/2015 1515
 Leach Date: 05/20/2015 1802

Units: mg/L

**Method: 6010C
Preparation: 3010A
TCLP**

MSD Lab Sample ID: 280-69513-6
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 06/01/2015 1152
 Prep Date: 05/28/2015 1515
 Leach Date: 05/20/2015 1802

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Arsenic	0.075	U	4.00	4.00	3.93

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Serial Dilution - Batch: 280-279206**Method: 6010C****Preparation: 3010A****TCLP**

Lab Sample ID:	280-69513-6	Analysis Batch:	280-279481	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25D052815.asc
Dilution:	5.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/29/2015 0054	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Barium	2.0		1.91	NC	10	J D
Cadmium	0.0053	J	0.045	NC	10	U
Chromium	0.0036	J	0.065	NC	10	U
Silver	0.018	U	0.088	NC	10	U

Serial Dilution - Batch: 280-279206**Method: 6010C****Preparation: 3010A****TCLP**

Lab Sample ID:	280-69513-6	Analysis Batch:	280-279689	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	26b053015.asc
Dilution:	5.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	05/30/2015 1448	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Lead	0.057	J	0.0658	NC	10	J D
Selenium	0.095	U	0.48	NC	10	U

Serial Dilution - Batch: 280-279206**Method: 6010C****Preparation: 3010A****TCLP**

Lab Sample ID:	280-69513-6	Analysis Batch:	280-279916	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-279206	Lab File ID:	25A060115.asc
Dilution:	5.0	Leach Batch:	280-278466	Initial Weight/Volume:	10 mL
Analysis Date:	06/01/2015 1147	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	05/28/2015 1515				
Leach Date:	05/20/2015 1802				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Arsenic	0.075	U	0.38	NC	10	U

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

TCLP SPLPE Leachate Blank - Batch: 280-278942

Method: 7470A

Preparation: 7470A

TCLP

Lab Sample ID:	LB 280-278466/1-E	Analysis Batch:	280-279184	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-278942	Lab File ID:	150526bb.txt
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	30 mL
Analysis Date:	05/26/2015 1746	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	05/26/2015 1100				
Leach Date:	05/20/2015 1802				

Analyte	Result	Qual	DL	LOQ
Mercury	0.000080	U	0.000030	0.0020

Lab Control Sample - Batch: 280-278942

Method: 7470A

Preparation: 7470A

TCLP

Lab Sample ID:	LCS 280-278466/2-E	Analysis Batch:	280-279184	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-278942	Lab File ID:	150526bb.txt
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	30 mL
Analysis Date:	05/27/2015 1114	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	05/26/2015 1100				
Leach Date:	05/20/2015 1802				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00725	145	90 - 116	Q

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-278942

Method: 7470A

Preparation: 7470A

TCLP

MS Lab Sample ID:	280-69513-6	Analysis Batch:	280-279184	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-278942	Lab File ID:	150526bb.txt
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	30 mL
Analysis Date:	05/26/2015 1818			Final Weight/Volume:	30 mL
Prep Date:	05/26/2015 1100				
Leach Date:	05/20/2015 1802				

MSD Lab Sample ID:	280-69513-6	Analysis Batch:	280-279184	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-278942	Lab File ID:	150526bb.txt
Dilution:	1.0	Leach Batch:	280-278466	Initial Weight/Volume:	30 mL
Analysis Date:	05/26/2015 1821			Final Weight/Volume:	30 mL
Prep Date:	05/26/2015 1100				
Leach Date:	05/20/2015 1802				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Mercury	106	107	90 - 116	1	10		

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-278942

**Method: 7470A
Preparation: 7470A
TCLP**

MS Lab Sample ID: 280-69513-6 Units: mg/L
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 05/26/2015 1818
Prep Date: 05/26/2015 1100
Leach Date: 05/20/2015 1802

MSD Lab Sample ID: 280-69513-6
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 05/26/2015 1821
Prep Date: 05/26/2015 1100
Leach Date: 05/20/2015 1802

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	0.000080 U	0.00500	0.00500	0.00528	0.00535

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Control Sample - Batch: 280-279661

Method: 9045D
Preparation: N/A

Lab Sample ID:	LCS 280-279611/1-A	Analysis Batch:	280-279661	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-279611	Initial Weight/Volume:	
Analysis Date:	05/30/2015 1124	Units:	SU	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	05/29/2015 1802				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
pH adj. to 25 deg C-Soluble	7.00	7.020	100	97 - 103	

DATA REPORTING QUALIFIERS

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Lab Section	Qualifier	Description
GC/MS VOA	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	M	Manual integrated compound.
	U	Undetected at the Limit of Detection.
Metals	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	Q	One or more quality control criteria failed.
	D	The reported value is from a dilution.
	U	Undetected at the Limit of Detection.

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-278801					
LCS 280-278801/2-A	Lab Control Sample	P	Solid	1311	
LB 280-278801/1-A	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-69513-5	54400-IDW01-0515	P	Solid	1311	
280-69513-6	54400-IDW02-0515	P	Solid	1311	
Analysis Batch:280-279458					
LCS 280-279458/4	Lab Control Sample	T	Water	8260B	
MB 280-279458/6	Method Blank	T	Water	8260B	
280-69513-1TB	54403-TB17-0515	T	Water	8260B	
280-69513-2	54400-MW53D-0515	T	Water	8260B	
280-69513-3	54400-MW53S-0515	T	Water	8260B	
280-69513-4EB	54402-EB17-0515	T	Water	8260B	
Analysis Batch:280-280068					
LCS 280-278801/2-A	Lab Control Sample	P	Solid	8260B	
LB 280-278801/1-A	TCLP SPLPE Leachate Blank	P	Solid	8260B	
280-69513-5	54400-IDW01-0515	P	Solid	8260B	
280-69513-6	54400-IDW02-0515	P	Solid	8260B	

Report Basis

P = TCLP

T = Total

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-278466					
LCS 280-278466/2-E	Lab Control Sample	P	Solid	1311	
LCS 280-278466/2-F	Lab Control Sample	P	Solid	1311	
LB 280-278466/1-E	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 280-278466/1-F	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-69513-5	54400-IDW01-0515	P	Solid	1311	
280-69513-6	54400-IDW02-0515	P	Solid	1311	
280-69513-6MS	Matrix Spike	P	Solid	1311	
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	1311	
Prep Batch: 280-278942					
LCS 280-278466/2-E	Lab Control Sample	P	Solid	7470A	280-278466
LB 280-278466/1-E	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-278466
280-69513-5	54400-IDW01-0515	P	Solid	7470A	280-278466
280-69513-6	54400-IDW02-0515	P	Solid	7470A	280-278466
280-69513-6MS	Matrix Spike	P	Solid	7470A	280-278466
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	7470A	280-278466
Analysis Batch: 280-279184					
LCS 280-278466/2-E	Lab Control Sample	P	Solid	7470A	280-278942
LB 280-278466/1-E	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-278942
280-69513-5	54400-IDW01-0515	P	Solid	7470A	280-278942
280-69513-6	54400-IDW02-0515	P	Solid	7470A	280-278942
280-69513-6MS	Matrix Spike	P	Solid	7470A	280-278942
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	7470A	280-278942
Prep Batch: 280-279206					
LCS 280-278466/2-F	Lab Control Sample	P	Solid	3010A	280-278466
LB 280-278466/1-F	TCLP SPLPE Leachate Blank	P	Solid	3010A	280-278466
280-69513-5	54400-IDW01-0515	P	Solid	3010A	280-278466
280-69513-6	54400-IDW02-0515	P	Solid	3010A	280-278466
280-69513-6MS	Matrix Spike	P	Solid	3010A	280-278466
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	3010A	280-278466
Analysis Batch: 280-279481					
LCS 280-278466/2-F	Lab Control Sample	P	Solid	6010C	280-279206
LB 280-278466/1-F	TCLP SPLPE Leachate Blank	P	Solid	6010C	280-279206
280-69513-5	54400-IDW01-0515	P	Solid	6010C	280-279206
280-69513-6	54400-IDW02-0515	P	Solid	6010C	280-279206
280-69513-6MS	Matrix Spike	P	Solid	6010C	280-279206
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	6010C	280-279206

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-279689					
LCS 280-278466/2-F	Lab Control Sample	P	Solid	6010C	280-279206
LB 280-278466/1-F	TCLP SPLPE Leachate Blank	P	Solid	6010C	280-279206
280-69513-5	54400-IDW01-0515	P	Solid	6010C	280-279206
280-69513-6	54400-IDW02-0515	P	Solid	6010C	280-279206
280-69513-6MS	Matrix Spike	P	Solid	6010C	280-279206
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	6010C	280-279206
Analysis Batch:280-279916					
LCS 280-278466/2-F	Lab Control Sample	P	Solid	6010C	280-279206
LB 280-278466/1-F	TCLP SPLPE Leachate Blank	P	Solid	6010C	280-279206
280-69513-5	54400-IDW01-0515	P	Solid	6010C	280-279206
280-69513-6	54400-IDW02-0515	P	Solid	6010C	280-279206
280-69513-6MS	Matrix Spike	P	Solid	6010C	280-279206
280-69513-6MSD	Matrix Spike Duplicate	P	Solid	6010C	280-279206

Report Basis

P = TCLP

General Chemistry

Analysis Batch:280-279256					
280-69513-5	54400-IDW01-0515	T	Solid	7.1.2	
280-69513-6	54400-IDW02-0515	T	Solid	7.1.2	
Prep Batch: 280-279611					
LCS 280-279611/1-A	Lab Control Sample	S	Solid	DI Leach	
280-69513-5	54400-IDW01-0515	S	Solid	DI Leach	
280-69513-6	54400-IDW02-0515	S	Solid	DI Leach	
Analysis Batch:280-279661					
LCS 280-279611/1-A	Lab Control Sample	S	Solid	9045D	
280-69513-5	54400-IDW01-0515	S	Solid	9045D	
280-69513-6	54400-IDW02-0515	S	Solid	9045D	

Report Basis

S = Soluble

T = Total

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Laboratory Chronicle

Lab ID: 280-69513-1

Client ID: 54403-TB17-0515

Sample Date/Time: 05/19/2015 00:00 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-69513-A-1		280-279458		05/29/2015 00:11	1	TAL DEN	BBB
A:8260B	280-69513-A-1		280-279458		05/29/2015 00:11	1	TAL DEN	BBB

Lab ID: 280-69513-2

Client ID: 54400-MW53D-0515

Sample Date/Time: 05/19/2015 08:55 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-69513-A-2		280-279458		05/29/2015 00:34	1	TAL DEN	BBB
A:8260B	280-69513-A-2		280-279458		05/29/2015 00:34	1	TAL DEN	BBB

Lab ID: 280-69513-3

Client ID: 54400-MW53S-0515

Sample Date/Time: 05/19/2015 11:50 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-69513-A-3		280-279458		05/29/2015 00:56	1	TAL DEN	BBB
A:8260B	280-69513-A-3		280-279458		05/29/2015 00:56	1	TAL DEN	BBB

Lab ID: 280-69513-4

Client ID: 54402-EB17-0515

Sample Date/Time: 05/19/2015 16:50 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-69513-A-4		280-279458		05/29/2015 01:19	1	TAL DEN	BBB
A:8260B	280-69513-A-4		280-279458		05/29/2015 01:19	1	TAL DEN	BBB

Lab ID: 280-69513-5

Client ID: 54400-IDW01-0515

Sample Date/Time: 05/19/2015 16:30 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-69513-B-5-A		280-280068		06/03/2015 00:40	1	TAL DEN	EMC
A:8260B	280-69513-B-5-A		280-280068		06/03/2015 00:40	1	TAL DEN	EMC
P:3010A	280-69513-A-5-D		280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-5-D		280-279481	280-279206	05/29/2015 00:48	1	TAL DEN	CRR
P:3010A	280-69513-A-5-D		280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-5-D		280-279689	280-279206	05/30/2015 14:42	1	TAL DEN	LLB
P:3010A	280-69513-A-5-D		280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-5-D		280-279916	280-279206	06/01/2015 11:42	1	TAL DEN	CRR
P:7470A	280-69513-A-5-C		280-279184	280-278942	05/26/2015 11:00	1	TAL DEN	CGG
A:7470A	280-69513-A-5-C		280-279184	280-278942	05/26/2015 18:14	1	TAL DEN	CGG
A:7.1.2	280-69513-A-5		280-279256		05/27/2015 20:48	1	TAL DEN	MW1
A:9045D	280-69513-A-5-E		280-279661		05/30/2015 11:24	1	TAL DEN	NAS

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Laboratory Chronicle

Lab ID: 280-69513-6

Client ID: 54400-IDW02-0515

Sample Date/Time: 05/19/2015 16:35 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-69513-B-6-A		280-280068		06/03/2015 02:37	1	TAL DEN	EMC
A:8260B	280-69513-B-6-A		280-280068		06/03/2015 02:37	1	TAL DEN	EMC
P:3010A	280-69513-A-6-H		280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-6-H		280-279481	280-279206	05/29/2015 00:51	1	TAL DEN	CRR
P:3010A	280-69513-A-6-H		280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-6-H		280-279689	280-279206	05/30/2015 14:45	1	TAL DEN	LLB
P:3010A	280-69513-A-6-H		280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-6-H		280-279916	280-279206	06/01/2015 11:44	1	TAL DEN	CRR
P:7470A	280-69513-A-6-E		280-279184	280-278942	05/26/2015 11:00	1	TAL DEN	CGG
A:7470A	280-69513-A-6-E		280-279184	280-278942	05/26/2015 18:16	1	TAL DEN	CGG
A:7.1.2	280-69513-A-6		280-279256		05/27/2015 20:48	1	TAL DEN	MW1
A:9045D	280-69513-A-6-K		280-279661		05/30/2015 11:24	1	TAL DEN	NAS

Lab ID: 280-69513-6 MS

Client ID: 54400-IDW02-0515

Sample Date/Time: 05/19/2015 16:35 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	280-69513-A-6-I MS		280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-6-I MS		280-279481	280-279206	05/29/2015 00:56	1	TAL DEN	CRR
P:3010A	280-69513-A-6-I MS		280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-6-I MS		280-279689	280-279206	05/30/2015 14:51	1	TAL DEN	LLB
P:3010A	280-69513-A-6-I MS		280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ
A:6010C	280-69513-A-6-I MS		280-279916	280-279206	06/01/2015 11:50	1	TAL DEN	CRR
P:7470A	280-69513-A-6-F MS		280-279184	280-278942	05/26/2015 11:00	1	TAL DEN	CGG
A:7470A	280-69513-A-6-F MS		280-279184	280-278942	05/26/2015 18:18	1	TAL DEN	CGG

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Laboratory Chronicle

Lab ID: 280-69513-6 MSD

Client ID: 54400-IDW02-0515

Sample Date/Time: 05/19/2015 16:35 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	280-69513-A-6-J MSD	280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	280-69513-A-6-J MSD	280-279481	280-279206	05/29/2015 00:59	1	TAL DEN	CRR	
P:3010A	280-69513-A-6-J MSD	280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	280-69513-A-6-J MSD	280-279689	280-279206	05/30/2015 14:53	1	TAL DEN	LLB	
P:3010A	280-69513-A-6-J MSD	280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	280-69513-A-6-J MSD	280-279916	280-279206	06/01/2015 11:52	1	TAL DEN	CRR	
P:7470A	280-69513-A-6-G MSD	280-279184	280-278942	05/26/2015 11:00	1	TAL DEN	CGG	
A:7470A	280-69513-A-6-G MSD	280-279184	280-278942	05/26/2015 18:21	1	TAL DEN	CGG	

Lab ID: 280-69513-6 SD

Client ID: 54400-IDW02-0515

Sample Date/Time: 05/19/2015 16:35 Received Date/Time: 05/20/2015 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	280-69513-A-6-H SD ^5	280-279481	280-279206	05/28/2015 15:15	5	TAL DEN	SEJ	
A:6010C	280-69513-A-6-H SD ^5	280-279481	280-279206	05/29/2015 00:54	5	TAL DEN	CRR	
P:3010A	280-69513-A-6-H PDS	280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	280-69513-A-6-H PDS	280-279481	280-279206	05/29/2015 01:02	1	TAL DEN	CRR	
P:3010A	280-69513-A-6-H SD ^5	280-279689	280-279206	05/28/2015 15:15	5	TAL DEN	SEJ	
A:6010C	280-69513-A-6-H SD ^5	280-279689	280-279206	05/30/2015 14:48	5	TAL DEN	LLB	
P:3010A	280-69513-A-6-H PDS	280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	280-69513-A-6-H PDS	280-279689	280-279206	05/30/2015 14:56	1	TAL DEN	LLB	
P:3010A	280-69513-A-6-H SD ^5	280-279916	280-279206	05/28/2015 15:15	5	TAL DEN	SEJ	
A:6010C	280-69513-A-6-H SD ^5	280-279916	280-279206	06/01/2015 11:47	5	TAL DEN	CRR	
P:3010A	280-69513-A-6-H PDS	280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	280-69513-A-6-H PDS	280-279916	280-279206	06/01/2015 11:55	1	TAL DEN	CRR	

Quality Control Results

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Laboratory Chronicle

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 280-279458/6		280-279458		05/28/2015 21:10	1	TAL DEN	BBB
A:8260B	MB 280-279458/6		280-279458		05/28/2015 21:10	1	TAL DEN	BBB

Lab ID: LB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LB 280-278801/1-A		280-280068		06/02/2015 23:41	1	TAL DEN	EMC
A:8260B	LB 280-278801/1-A		280-280068		06/02/2015 23:41	1	TAL DEN	EMC
P:3010A	LB 280-278466/1-F	280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	LB 280-278466/1-F	280-279481	280-279206	05/29/2015 00:43	1	TAL DEN	CRR	
P:3010A	LB 280-278466/1-F	280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	LB 280-278466/1-F	280-279689	280-279206	05/30/2015 14:37	1	TAL DEN	LLB	
P:3010A	LB 280-278466/1-F	280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	LB 280-278466/1-F	280-279916	280-279206	06/01/2015 11:36	1	TAL DEN	CRR	
P:7470A	LB 280-278466/1-E	280-279184	280-278942	05/26/2015 11:00	1	TAL DEN	CGG	
A:7470A	LB 280-278466/1-E	280-279184	280-278942	05/26/2015 17:46	1	TAL DEN	CGG	

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 280-279458/4		280-279458		05/28/2015 20:25	1	TAL DEN	BBB
A:8260B	LCS 280-279458/4		280-279458		05/28/2015 20:25	1	TAL DEN	BBB
P:5030B	LCS 280-278801/2-A	280-280068			06/02/2015 23:22	1	TAL DEN	EMC
A:8260B	LCS 280-278801/2-A	280-280068			06/02/2015 23:22	1	TAL DEN	EMC
P:3010A	LCS 280-278466/2-F	280-279481	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	LCS 280-278466/2-F	280-279481	280-279206	05/29/2015 00:46	1	TAL DEN	CRR	
P:3010A	LCS 280-278466/2-F	280-279689	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	LCS 280-278466/2-F	280-279689	280-279206	05/30/2015 14:40	1	TAL DEN	LLB	
P:3010A	LCS 280-278466/2-F	280-279916	280-279206	05/28/2015 15:15	1	TAL DEN	SEJ	
A:6010C	LCS 280-278466/2-F	280-279916	280-279206	06/01/2015 11:39	1	TAL DEN	CRR	
P:7470A	LCS 280-278466/2-E	280-279184	280-278942	05/26/2015 11:00	1	TAL DEN	CGG	
A:7470A	LCS 280-278466/2-E	280-279184	280-278942	05/27/2015 11:14	1	TAL DEN	CGG	
A:9045D	LCS 280-279611/1-A	280-279661			05/30/2015 11:24	1	TAL DEN	NAS

Lab References:

TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Alt AsPbSbTh_00002	05/31/15	05/30/15	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm As_00004	0.1 mL	Arsenic	0.01 ppm
					10 ppm Pb_00005	0.09 mL	Lead	0.009 ppm
.10 ppm As_00004	10/01/15	12/04/14	5%HNO3/5% HCl, Lot See Reagent log	100 mL	1000 As_00012	1 mL	Arsenic	10 ppm
..1000 As_00012	10/01/15		Inorganic Venture, Lot g2-as02102		(Purchased Reagent)		Arsenic	1000 mg/L
.10 ppm Pb_00005	09/01/15	12/04/14	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Pb_00014	1 mL	Lead	10 mg/L
..1000 Pb_00014	09/01/15		Inorganic Ventures, Lot g2-PB03044		(Purchased Reagent)		Lead	1000 mg/L
Hg Daily Spk_01378	05/27/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00088	1 mL	Mercury	0.1 mg/L
.Hg Mnth Spike_00088	06/26/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg Ultra Prim_00008	1 mL	Mercury	10 mg/L
..Hg Ultra Prim_00008	03/10/16		Ultra Scientific, Lot P00139		(Purchased Reagent)		Mercury	1000 mg/L
Hg H20 CCV_00117	05/27/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg Daily Spk_01378	5 mL	Mercury	0.005 mg/L
.Hg Daily Spk_01378	05/27/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00088	1 mL	Mercury	0.1 mg/L
..Hg Mnth Spike_00088	06/26/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg Ultra Prim_00008	1 mL	Mercury	10 mg/L
...Hg Ultra Prim_00008	03/10/16		Ultra Scientific, Lot P00139		(Purchased Reagent)		Mercury	1000 mg/L
Hg H20 ICV_00912	05/27/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg Biwk ICV_00168	1 mL	Mercury	0.004 mg/L
.Hg Biwk ICV_00168	06/09/15	05/26/15	1% HNO3, Lot K23022	100 mL	Hg ICV Stock_00007	0.4 mL	Mercury	0.4 mg/L
..Hg ICV Stock_00007	03/09/16		Inorganic Ventures, Lot H2-HG02113R		(Purchased Reagent)		Mercury	100 mg/L
ICP CCV_00039	09/01/15	05/22/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00503	250 mL	Arsenic	1 mg/L
							Lead	1 mg/L
							Selenium	1 mg/L
							Barium	0.5 mg/L
							Cadmium	0.5 mg/L
							Chromium	0.5 mg/L
							Silver	0.5 mg/L
.ICP ICAL1A_00503	09/01/15	05/22/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	1000 As_00013	1 mL	Arsenic	2 mg/L
					1000 Pb_00015	1 mL	Lead	2 mg/L
					1000 Se_00010	1 mL	Selenium	2 mg/L
					Icp cal std 3_00009	5 mL	Barium	1 mg/L
							Cadmium	1 mg/L
							Chromium	1 mg/L
							Silver	1 mg/L
..1000 As_00013	12/11/17		Inorganic Venture, Lot H2-AS02102R		(Purchased Reagent)		Arsenic	1000 mg/L
..1000 Pb_00015	01/01/16		Inorganic Ventures, Lot g2-PB03044		(Purchased Reagent)		Lead	1000 mg/L
..1000 Se_00010	01/31/16		Inorganic Ventures, Lot H2--SE02049		(Purchased Reagent)		Selenium	1000 mg/L
..Icp cal std 3_00009	09/01/15		Inorganic Ventures, Lot H2-MEB541066		(Purchased Reagent)		Barium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Silver	100 mg/L
ICP CCV_00040	09/01/15	05/28/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00504	250 mL	Arsenic	1 mg/L
							Lead	1 mg/L
							Selenium	1 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	0.5 mg/L
							Cadmium	0.5 mg/L
							Chromium	0.5 mg/L
							Silver	0.5 mg/L
.ICP ICAL1A_00504	09/01/15	05/28/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	1000 As_00013	1 mL	Arsenic	2 mg/L
					1000 Pb_00015	1 mL	Lead	2 mg/L
					1000 Se_00010	1 mL	Selenium	2 mg/L
					Icp cal std 3_00009	5 mL	Barium	1 mg/L
							Cadmium	1 mg/L
							Chromium	1 mg/L
							Silver	1 mg/L
..1000 As_00013	12/11/17	Inorganic Venture, Lot H2-AS02102R			(Purchased Reagent)		Arsenic	1000 mg/L
..1000 Pb_00015	01/01/16	Inorganic Ventures, Lot g2-PB03044			(Purchased Reagent)		Lead	1000 mg/L
..1000 Se_00010	01/31/16	Inorganic Ventures, Lot H2--SE02049			(Purchased Reagent)		Selenium	1000 mg/L
..Icp cal std 3_00009	09/01/15	Inorganic Ventures, Lot H2-MEB541066			(Purchased Reagent)		Barium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Silver	100 mg/L
ICP CRI_00087	05/29/15	05/28/15	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00008	0.1 mL	Barium	0.005 mg/L
							Cadmium	0.005 mg/L
							Chromium	0.01 mg/L
							Silver	0.01 mg/L
.ICP RL STD3A_00008	08/01/15	Inorganic Ventures, Lot h2-meb536076			(Purchased Reagent)		Barium	5 mg/L
							Cadmium	5 mg/L
							Chromium	10 mg/L
							Silver	10 mg/L
ICP CRI_00089	05/31/15	05/30/15	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00008	0.1 mL	Barium	0.005 mg/L
							Cadmium	0.005 mg/L
							Chromium	0.01 mg/L
					ICP RLSTD 1A_00008	0.1 mL	Silver	0.01 mg/L
							Selenium	0.01 mg/L
.ICP RL STD3A_00008	08/01/15	Inorganic Ventures, Lot h2-meb536076			(Purchased Reagent)		Barium	5 mg/L
							Cadmium	5 mg/L
							Chromium	10 mg/L
							Silver	10 mg/L
.ICP RLSTD 1A_00008	08/01/15	Inorganic Ventures, Lot G2-meb481018			(Purchased Reagent)		Selenium	10 mg/L
ICP CRI_00090	06/02/15	06/01/15	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00008	0.1 mL	Barium	0.005 mg/L
							Cadmium	0.005 mg/L
							Chromium	0.01 mg/L
							Silver	0.01 mg/L
					ICP RLSTD 1A_00008	0.1 mL	Arsenic	0.01 mg/L
.ICP RL STD3A_00008	08/01/15	Inorganic Ventures, Lot h2-meb536076			(Purchased Reagent)		Barium	5 mg/L
							Cadmium	5 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	10 mg/L
							Silver	10 mg/L
.ICP RLSTD 1A 00008	08/01/15	Inorganic Ventures, Lot G2-meb481018		(Purchased Reagent)		Arsenic		10 mg/L
ICP ICSA_00104	01/01/16	05/18/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00012	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Fe	200 mg/L
							Mg	500 mg/L
.Icp stk ICSA_00012	01/01/16	Inorganic Ventures, Lot H2-MEB525068		(Purchased Reagent)		Al		5000 mg/L
							Ca	5000 mg/L
							Fe	2000 mg/L
							Mg	5000 mg/L
ICP ICSAB_00109	06/30/15	05/22/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	1000 Tl_00010	2.5 mL	Tl	10 mg/L
					ANALYTES B_00008	2.5 mL	Barium	0.5 mg/L
							Be	0.5 mg/L
							Cadmium	1 mg/L
							Chromium	0.5 mg/L
							Co	0.5 mg/L
							Cu	0.5 mg/L
							Lead	1 mg/L
							Mn	0.5 mg/L
							Ni	1 mg/L
							Silver	1 mg/L
							V	0.5 mg/L
							Zn	1 mg/L
					ICP ISAB STD1_00006	2.5 mL	Arsenic	2 mg/L
							K	50 mg/L
							Li	1 mg/L
							Mo	1 mg/L
							Na	50 mg/L
							Sb	1 mg/L
							Selenium	5 mg/L
					Icp stk ICSA_00012	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Fe	200 mg/L
							Mg	500 mg/L
.1000 Tl_00010	11/20/17	Inorganic Ventures, Lot H2-TL02003R		(Purchased Reagent)		Tl		1000 mg/L
.ANALYTES B_00008	06/30/15	SPEX, Lot 9-164ypy		(Purchased Reagent)		Barium		50 mg/L
							Be	50 mg/L
							Cadmium	100 mg/L
							Chromium	50 mg/L
							Co	50 mg/L
							Cu	50 mg/L
							Lead	100 mg/L
							Mn	50 mg/L
							Ni	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration			
					Reagent ID	Volume Added					
					(Purchased Reagent)		Silver	100 mg/L			
.ICP ISAB STD1_00006	09/20/15	High Purity, Lot 1407732					V	50 mg/L			
							Zn	100 mg/L			
							Arsenic	200 mg/L			
							K	5000 mg/L			
							Li	100 mg/L			
							Mo	100 mg/L			
							Na	5000 mg/L			
							Sb	100 mg/L			
							Selenium	500 mg/L			
.Icp stk ICSA_00012	01/01/16	Inorganic Ventures, Lot H2-MEB525068			(Purchased Reagent)		Al	5000 mg/L			
							Ca	5000 mg/L			
							Fe	2000 mg/L			
							Mg	5000 mg/L			
ICP ICV_00029	11/05/15	05/22/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00008	1 mL	Arsenic	0.25 mg/L			
							Barium	0.25 mg/L			
							Cadmium	0.25 mg/L			
							Chromium	0.25 mg/L			
							Lead	0.25 mg/L			
					Icp ICVL B_00008	1 mL	Selenium	0.5 mg/L			
							Silver	0.25 mg/L			
							Arsenic	25 mg/L			
							Barium	25 mg/L			
.Icp ICVL A_00008	11/05/15	High Purity, Lot 1430702			(Purchased Reagent)		Cadmium	25 mg/L			
							Chromium	25 mg/L			
							Lead	25 mg/L			
							Selenium	50 mg/L			
							Silver	25 mg/L			
.Icp ICVL B_00008	11/05/15	HIGH PURITY, Lot 1405755			(Purchased Reagent)						
ICP LLCCV_01470	05/29/15	05/28/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00025	1 mL	Arsenic	0.015 mg/L			
							Barium	0.01 mg/L			
							Cadmium	0.005 mg/L			
							Chromium	0.01 mg/L			
							Lead	0.009 mg/L			
					Silver	1 mL	Selenium	0.015 mg/L			
							Silver	0.01 mg/L			
.ICP LLCCV-1_00025	12/01/15	Inorganic Ventures, Lot H2-MEB534141			(Purchased Reagent)		Arsenic	1.5 mg/L			
							Barium	1 mg/L			
							Cadmium	0.5 mg/L			
							Chromium	1 mg/L			
							Lead	0.9 mg/L			
							Selenium	1.5 mg/L			
							Silver	1 mg/L			
ICP LLCCV_01472	05/31/15	05/30/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00025	1 mL	Arsenic	0.015 mg/L			
							Barium	0.01 mg/L			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	0.005 mg/L
							Chromium	0.01 mg/L
							Lead	0.009 mg/L
							Selenium	0.015 mg/L
							Silver	0.01 mg/L
.ICP LLCCV-1_00025	12/01/15	Inorganic Ventures, Lot H2-MEB534141			(Purchased Reagent)		Arsenic	1.5 mg/L
							Barium	1 mg/L
							Cadmium	0.5 mg/L
							Chromium	1 mg/L
							Lead	0.9 mg/L
							Selenium	1.5 mg/L
							Silver	1 mg/L
ICP LLCCV_01473	06/02/15	06/01/15	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00025	1 mL	Arsenic	0.015 mg/L
							Barium	0.01 mg/L
							Cadmium	0.005 mg/L
							Chromium	0.01 mg/L
							Lead	0.009 mg/L
							Silver	0.01 mg/L
.ICP LLCCV-1_00025	12/01/15	Inorganic Ventures, Lot H2-MEB534141			(Purchased Reagent)		Arsenic	1.5 mg/L
							Barium	1 mg/L
							Cadmium	0.5 mg/L
							Chromium	1 mg/L
							Lead	0.9 mg/L
							Silver	1 mg/L
ICP PDS 1_00010	01/01/16	Inorganic Ventures, Lot H2-MEB546062			(Purchased Reagent)		Lead	10 mg/L
							Selenium	20 mg/L
ICP PDS 1_00011	04/01/16	Inorganic Ventures, Lot H2-MEB546062			(Purchased Reagent)		Arsenic	20 mg/L
							Barium	10 mg/L
							Cadmium	5 mg/L
							Chromium	5 mg/L
							Silver	5 mg/L
ICP SPK 2B_00025	06/01/16	Inorganic Ventures, Lot H2-MEB546154			(Purchased Reagent)		B	100 mg/L
							Mo	100 mg/L
							Sb	50 mg/L
							Si	1000 mg/L
							SiO2	2140 mg/L
							Sn	200 mg/L
							Sulfur	200 mg/L
							Ti	100 mg/L
							Zr	50 mg/L
ICP SPK 3A_00097	06/01/16	Inorganic Ventures, Lot H2-MEB571140			(Purchased Reagent)		Al	200 mg/L
							Arsenic	100 mg/L
							Barium	200 mg/L
							Be	5 mg/L
							Bi	200 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					Ca	5000	mg/L	
					Cadmium	10	mg/L	
					Chromium	20	mg/L	
					Co	50	mg/L	
					Cu	25	mg/L	
					Fe	100	mg/L	
					K	5000	mg/L	
					Lead	50	mg/L	
					Li	100	mg/L	
					Mg	5000	mg/L	
					Mn	50	mg/L	
					Na	5000	mg/L	
					Ni	50	mg/L	
					P	1000	mg/L	
					Selenium	200	mg/L	
					Silver	5	mg/L	
					Sr	100	mg/L	
					Th	100	mg/L	
					Tl	200	mg/L	
					U	200	mg/L	
					V	50	mg/L	
					Zn	50	mg/L	
MV-2cleve+AVA_00009	05/31/15	03/02/15	P&T Methanol, Lot 85233	20 mL	MV-567643_00008	400 uL	2-Chloroethyl vinyl ether	40 ug/mL
					MV-568720_00006	405 uL	Acrolein	399.938 ug/mL
					MV-569724_00001	320 uL	Vinyl acetate	80 ug/mL
.MV-567643_00008	02/29/16		RESTEK, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
.MV-568720_00006	05/31/15		RESTEK, Lot A0108734		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569724_00001	07/31/15		RESTEK, Lot A0108225		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-2cleve+AVA_00010	07/31/15	06/01/15	P&T Methanol, Lot 85233	20 mL	MV-567643_00009	400 uL	2-Chloroethyl vinyl ether	40 ug/mL
					MV-568720_00007	405 uL	Acrolein	399.938 ug/mL
					MV-569724_00001	320 uL	Vinyl acetate	80 ug/mL
.MV-567643_00009	02/29/16		RESTEK, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
.MV-568720_00007	07/31/15		RESTEK, Lot A0109948		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569724_00001	07/31/15		RESTEK, Lot A0108225		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-567649-D_00001	02/28/18		RESTEK, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
MV-568718-D_00002	12/31/18		RESTEK, Lot A099955		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
MV-ARCH SS A_00035	06/29/15	12/29/14	P&T Methanol, Lot 62345	50 mL	MV-567650_00019	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MV-567650_00019	01/31/19		Restek, Lot A0101000		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-ARCH SS A_00042	09/30/15	03/30/15	P&T Methanol, Lot 85233	50 mL	MV-567650_00020	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00020	08/31/19		Restek, Lot A0105143		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-Gas/Ket A_00033	11/14/15	05/14/15	P&T Methanol, Lot 85233	10 mL	MV-567642_00018	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567645_00019	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Dichlorofluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
					MV-567648_00029	800 uL	Cyclohexanone	1600 ug/mL
.MV-567642_00018	02/29/16		RESTEK, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645_00019	09/30/16		RESTEK, Lot A0105755		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.MV-567648_00029	12/31/17		RESTEK, Lot A0108012		(Purchased Reagent)		Cyclohexanone	20000 ug/mL
MV-Gas/Ket B_00017	07/07/15	01/07/15	P&T Methanol, Lot 62345	10 mL	MV-567642.sec_00015	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567645.sec_00017	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MV-567642.sec_00015	02/28/17		RESTEK, Lot A0101295		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645.sec_00017	11/30/15		RESTEK, Lot A099261		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MV-Main A_00022	07/16/15	01/16/15	P&T Methanol, Lot 62345	25 mL	MV-567641_00014	500 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	800 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							3-Chloro-1-propene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							Acrylonitrile	400 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	40 ug/mL
							Cyclohexane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethyl ether	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexane	40 ug/mL
							Iodomethane	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylcyclohexane	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							p-Isopropyltoluene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butyl alcohol	400 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Tetrahydrofuran	80 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							trans-1,4-Dichloro-2-butene	40 ug/mL
							Trichloroethene	40 ug/mL
					MV-568034_00010	1000 uL	1-Chlorohexane	40 ug/mL
							2-Pentanone	160 ug/mL
							sec-Butyl Alcohol	1200 ug/mL
.MV-567641_00014	02/29/16	RESTEK, Lot A093581		(Purchased Reagent)			1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					1,2-Dibromo-3-Chloropropane	2000 ug/mL		
					1,2-Dibromoethane	2000 ug/mL		
					1,2-Dichlorobenzene	2000 ug/mL		
					1,2-Dichloroethane	2000 ug/mL		
					1,2-Dichloropropane	2000 ug/mL		
					1,3,5-Trimethylbenzene	2000 ug/mL		
					1,3-Dichlorobenzene	2000 ug/mL		
					1,3-Dichloropropane	2000 ug/mL		
					1,4-Dichlorobenzene	2000 ug/mL		
					1,4-Dioxane	40000 ug/mL		
					2,2-Dichloropropane	2000 ug/mL		
					2-Chlorotoluene	2000 ug/mL		
					3-Chloro-1-propene	2000 ug/mL		
					4-Chlorotoluene	2000 ug/mL		
					Acrylonitrile	20000 ug/mL		
					Benzene	2000 ug/mL		
					Bromobenzene	2000 ug/mL		
					Bromochloromethane	2000 ug/mL		
					Bromodichloromethane	2000 ug/mL		
					Bromoform	2000 ug/mL		
					Carbon disulfide	2000 ug/mL		
					Carbon tetrachloride	2000 ug/mL		
					Chlorobenzene	2000 ug/mL		
					Chlorodibromomethane	2000 ug/mL		
					Chloroform	2000 ug/mL		
					cis-1,2-Dichloroethene	2000 ug/mL		
					cis-1,3-Dichloropropene	2000 ug/mL		
					Cyclohexane	2000 ug/mL		
					Dibromomethane	2000 ug/mL		
					Ethyl ether	2000 ug/mL		
					Ethyl methacrylate	2000 ug/mL		
					Ethylbenzene	2000 ug/mL		
					Hexachlorobutadiene	2000 ug/mL		
					Hexane	2000 ug/mL		
					Iodomethane	2000 ug/mL		
					Isobutyl alcohol	50000 ug/mL		
					Isopropylbenzene	2000 ug/mL		
					m-Xylene & p-Xylene	2000 ug/mL		
					Methyl acetate	10000 ug/mL		
					Methyl tert-butyl ether	2000 ug/mL		
					Methylcyclohexane	2000 ug/mL		
					Methylene Chloride	2000 ug/mL		
					n-Butylbenzene	2000 ug/mL		
					N-Propylbenzene	2000 ug/mL		
					Naphthalene	2000 ug/mL		
					o-Xylene	2000 ug/mL		
					p-Isopropyltoluene	2000 ug/mL		
					sec-Butylbenzene	2000 ug/mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	2000 ug/mL
							tert-Butyl alcohol	20000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.MV-568034_00010	01/31/16	RESTEK, Lot A0104827			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-Main B_00009	05/28/15	11/28/14	P&T Methanol, Lot 62345	20 mL	MV-567641.sec_00010	400 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							p-Isopropyltoluene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butyl alcohol	400 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
.MV-567641.sec_00010	02/29/16	RESTEK, Lot A093733		(Purchased Reagent)			1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					Bromodichloromethane	2000 ug/mL		
					Bromoform	2000 ug/mL		
					Carbon disulfide	2000 ug/mL		
					Carbon tetrachloride	2000 ug/mL		
					Chlorobenzene	2000 ug/mL		
					Chlorodibromomethane	2000 ug/mL		
					Chloroform	2000 ug/mL		
					cis-1,2-Dichloroethene	2000 ug/mL		
					cis-1,3-Dichloropropene	2000 ug/mL		
					Dibromomethane	2000 ug/mL		
					Ethylbenzene	2000 ug/mL		
					Hexachlorobutadiene	2000 ug/mL		
					Isopropylbenzene	2000 ug/mL		
					m-Xylene & p-Xylene	2000 ug/mL		
					Methyl tert-butyl ether	2000 ug/mL		
					Methylene Chloride	2000 ug/mL		
					n-Butylbenzene	2000 ug/mL		
					N-Propylbenzene	2000 ug/mL		
					Naphthalene	2000 ug/mL		
					o-Xylene	2000 ug/mL		
					p-Isopropyltoluene	2000 ug/mL		
					sec-Butylbenzene	2000 ug/mL		
					Styrene	2000 ug/mL		
					tert-Butyl alcohol	20000 ug/mL		
					tert-Butylbenzene	2000 ug/mL		
					Tetrachloroethene	2000 ug/mL		
					Toluene	2000 ug/mL		
					trans-1,2-Dichloroethene	2000 ug/mL		
					trans-1,3-Dichloropropene	2000 ug/mL		
					Trichloroethene	2000 ug/mL		
MV-Main B_00010	10/20/15	04/20/15	P&T Methanol, Lot 85233	20 mL	MV-567641.sec_00010	400 uL	1,1-Dichloroethene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							Benzene	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Trichloroethene	40 ug/mL
.MV-567641.sec_00010	02/29/16		RESTEK, Lot A093733		(Purchased Reagent)		1,1-Dichloroethene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							Benzene	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Trichloroethene	2000 ug/mL
MV-Supp A_00011	06/30/15	02/03/15	P&T Methanol, Lot 85233	10 mL	MV-568036_00007	400 uL	cis-1,4-Dichloro-2-butene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

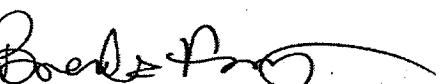
SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<u>.MV-568036_00007</u>	12/31/15		RESTEK, Lot A0104018		mv-569725_00001	160 uL	1,2,3-Trimethylbenzene	40 ug/mL
							2-Chloro-1,3-butadiene	40 ug/mL
<u>.mv-569725_00001</u>	07/31/15		Restek, Lot A0108219		mv-569728_00001	200 uL	2-Nitropropane	80 ug/mL
							Ethyl acetate	80 ug/mL
<u>.mv-569728_00001</u>	01/31/17		RESTEK, Lot A0108216		(Purchased Reagent)		Isopropyl alcohol	400 ug/mL
							Methacrylonitrile	400 ug/mL
<u>pH 7.0 Buffer_00138</u>	03/31/17		Ricca, Lot 4504054		(Purchased Reagent)		Methyl methacrylate	80 ug/mL
<u>pH 7.0 ICV_00059</u>	08/31/16		Fisher, Lot 147065		(Purchased Reagent)		n-Butanol	1000 ug/mL
<u>TCLP Spike_00011</u>	06/01/15		Inorganic Ventures, Lot G2-MEB477032		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
							1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Ethyl acetate	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butanol	62500 ug/mL
							Acetonitrile	25000 ug/mL
							Ethanol	100000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

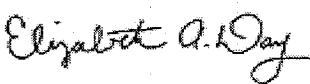
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



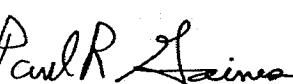
Certificate Approved By:

Elizabeth Day
Quality Assurance Specialist



Certifying Officer:

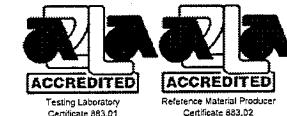
Paul Gaines
PhD., Senior Technical Director




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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAS1
Lot Number: G2-AS02102
Matrix: 2% (v/v) HNO₃
Value/Analyte(s): 1 000 µg/mL Arsenic
Starting Material: As Lump
Starting Material Lot#: 1814
Starting Material Purity: 99.9995%



2890365
ID: 1000 As_00012
Exp:10/01/15 Prd:SJS Ope:09/26/14
1000 As IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1,001 ± 5 µg/mL -weighted mean-
Certified Density: 1.012 (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 999 ± 4 µg/mL
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 1,002 ± 3 µg/mL
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$CRM/RM Expanded Uncertainty (±) = U_{CRM/RM} = k (u_{char\ a\&b}^2 + u_{bb}^2 + u_{ts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

$$CRM/RM Expanded Uncertainty (±) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{ts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M	Ag <	0.004456	M	Er <	0.000557	O	Mn	0.000018	n	S <	M	V <	0.000557	
O	Al	0.000449	M	Eu <	0.000557	O	Mo <	0.003000	O	Sb <	0.010000	O	W <	0.010000
s	As <		O	Fe	0.000162	O	Na	0.000718	O	Sc <	0.000800	O	Y <	0.001000
O	Au <	0.006000	M	Ga <	0.001114	O	Nb <	0.005000	O	Se <	0.020000	M	Yb <	0.000557
O	B	0.000269	M	Gd <	0.000557	M	Nd <	0.000557	O	Si	0.002513	O	Zn	0.000090
O	Ba <	0.000700	M	Ge <	0.001671	O	Ni <	0.002000	M	Sm <	0.000557	O	Zr <	0.002000
M	Be <	0.000557	M	Hf <	0.003899	n	Os <		O	Sn <	0.003000			
M	Bi <	0.002228	O	Hg <	0.005000	O	P <	0.030000	O	Sr <	0.000200			
O	Ca	0.001077	M	Ho <	0.000557	M	Pb <	0.000557	M	Ta <	0.004456			
O	Cd <	0.000400	M	In <	0.033418	O	Pd <	0.010000	M	Tb <	0.000557			
M	Ce <	0.000557	M	Ir <	0.001114	M	Pr <	0.000557	O	Te <	0.010000			
O	Co	0.000180	O	K <	0.007000	M	Pt <	0.000557	M	Th <	0.000557			
O	Cr <	0.001000	M	La <	0.002785	M	Rb <	0.000557	O	Ti	0.000126			
M	Cs <	0.000557	O	Li <	0.000140	M	Re <	0.000557	M	Tl <	0.000557			
M	Cu <	0.001114	M	Lu <	0.000557	M	Rh <	0.000557	M	Tm <	0.000557			
M	Dy <	0.000557	O	Mg	0.000054	M	Ru <	0.000557	M	U <	0.000557			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 \pm 4°C. Do not pipette from the container. Do not return removed aliquots to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 mix of +3 and +5 6 H₃AsO₄ and HAsO₂

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO₃, H₃PO₄, H₂SO₄ and HF aqueous matrices water and NH₄OH. It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO₃ / LDPE container.

As Containing Samples (Preparation and Solution) - As₂O₃ (soluble in 1:1 H₂O / HNO₃); Oxides (the oxide exists in crystalline and amorphous forms where the amorphous form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (One gram of powdered sample is fused in a NiO crucible with 10 grams of a 1:1 mix of K₂CO₃ and KNO₃ and

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H, 8Ar37Cl,A <u>r39K</u> , 150Nd ²⁺ , 150Sm ²⁺
ICP-OES 189.042 nm	0.05/0.005 $\mu\text{g/mL}$	1	Cr
ICP-OES 193.696 nm	0.1/0.01 $\mu\text{g/mL}$	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 $\mu\text{g/mL}$	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2013

11.2 Expiration Date

EXPIRES
01st 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.



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Christiansburg, VA 24073 • USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAS1
Lot Number: H2-AS02102R
Matrix: 2% (v/v) HNO₃
Value/Analyte(s): 1 000 µg/mL Arsenic
Starting Material: As Lump
Starting Material Lot#: 1814
Starting Material Purity: 99.9995%



3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 5 µg/mL - weighted mean
Certified Density: 1.012 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 999 ± 4 µg/mL
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 1002 ± 3 µg/mL
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k(u_{char\ a\&b}^2 + u_{bb}^2 + u_{lts}^2 + u_{sts}^2)^{1/2}$$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

$$CRM/RM Expanded Uncertainty (\pm) = U_{CRM/RM} = k(u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M	Ag	<	0.004455	M	Eu	<	0.000556	O	Na	0.000718	O	Se	<	0.020000	O	Zn	0.000089	
O	Al	0.000448	O	Fe	0.000161	O	Nb	<	0.005000	O	Si	0.002513	O	Zr	<	0.002000		
s	As	<	M	Ga	<	0.001113	M	Nd	<	0.000556	M	Sm	<	0.000556				
O	Au	<	0.006000	M	Gd	<	0.000556	O	Ni	<	0.002000	O	Sn	<	0.003000			
O	B	0.000269	M	Ge	<	0.001670	n	Os	<		O	Sr	<	0.000200				
O	Ba	<	0.000700	M	Hf	<	0.003898	O	P	<	0.030000	M	Ta	<	0.004455			
M	Be	<	0.000556	O	Hg	<	0.005000	M	Pb	<	0.000556	M	Tb	<	0.000556			
M	Bi	<	0.002227	M	Ho	<	0.000556	O	Pd	<	0.010000	O	Te	<	0.010000			
O	Ca	0.001077	M	In	<	0.033417	M	Pr	<	0.000556	M	Th	<	0.000556				
O	Cd	<	0.000400	M	Ir	<	0.001113	M	Pt	<	0.000556	O	Ti	0.000125				
M	Ce	<	0.000556	O	K	<	0.007000	M	Rb	<	0.000556	M	Tl	<	0.000556			
O	Co	0.000179	M	La	<	0.002784	M	Re	<	0.000556	M	Tm	<	0.000556				
O	Cr	<	0.001000	O	Li	<	0.000140	M	Rh	<	0.000556	M	U	<	0.000556			
M	Cs	<	0.000556	M	Lu	<	0.000556	M	Ru	<	0.000556	M	V	<	0.000556			
M	Cu	<	0.001113	O	Mg	0.000053	n	S	<		O	W	<	0.010000				
M	Dy	<	0.000556	O	Mn	0.000017	O	Sb	<	0.010000	O	Y	<	0.001000				
M	Er	<	0.000556	O	Mo	<	0.003000	O	Sc	<	0.000800	M	Yb	<	0.000556			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element



300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGPB1
Lot Number: G2-PB03044
Matrix: 0.5%(v/v) HNO₃
Value/Analyte(s): 1 000 µg/mL Lead
Starting Material: Pb(NO₃)₂
Starting Material Lot#: 1717
Starting Material Purity: 99.9998%



2830401
ID: 1000 Pb 00014
Exp:09/01/15 Rptd:SJS Opm:08/18/14
1000 Pb IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1,000 ± 3 µg/mL -weighted mean-
Certified Density: 1.002 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 998 ± 3 µg/mL
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 1,002 ± 3 µg/mL
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, X_{CRM/RM}, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty u_{char a}

X_b = mean of Assay Method B with standard uncertainty u_{char b}

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char a})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$w_b = (1/u_{char b})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$CRM/RM Expanded Uncertainty (t) = U_{CRM/RM} = k (u_{char a&b}^2 + u_{bb}^2 + u_{ts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

u_{char a&b} = [(w_a)²(u_{char a})² + (w_b)²(u_{char b})²]^{1/2} where u_{char a} and u_{char b} are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, X_{CRM/RM}, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char a}$$

$$CRM/RM Expanded Uncertainty (t) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{ts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

u_{char a} = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M	Ag < 0.005980	M	Er < 0.014949	M	Mn < 0.011959	O	S < 0.100000	M	V < 0.005980
O	Al 0.000633	M	Eu < 0.008969	M	Mo < 0.005980	M	Sb < 0.001495	M	W < 0.029898
M	As < 0.029898	O	Fe 0.000500	O	Na < 0.006000	M	Sc < 0.029898	M	Y < 0.119592
M	Au < 0.008969	M	Ga < 0.002990	M	Nb < 0.001495	M	Se < 0.023918	M	Yb < 0.002990
O	B < 0.040000	M	Gd < 0.002990	M	Nd < 0.005980	O	Si < 0.003400	O	Zn < 0.000200
O	Ba 0.000500	M	Ge < 0.017939	O	Ni < 0.003000	M	Sm < 0.002990	M	Zr < 0.014949
M	Be < 0.001495	M	Hf < 0.005980	n	Os <	M	Sn < 0.014949		
O	Bi < 0.020000	O	Hg < 0.015000	O	P < 0.005000	O	Sr 0.000200		
O	Ca 0.000567	M	Ho < 0.001495	s	Pb <	M	Ta < 0.020929		
M	Cd < 0.008969	M	In < 0.029898	M	Pd < 0.014949	M	Tb < 0.000897		
M	Ce < 0.014949	M	Ir < 0.014949	M	Pr < 0.000897	M	Te < 0.089694		
M	Co < 0.008969	O	K 0.000167	M	Pt < 0.005980	M	Th < 0.002990		
M	Cr < 0.014949	M	La < 0.001495	M	Rb < 0.002990	M	Ti < 0.149490		
M	Cs < 0.000897	O	Li 0.000100	M	Re < 0.002990	O	Tl < 0.022000		
M	Cu < 0.017939	M	Lu < 0.001196	O	Rh < 0.009000	M	Tm < 0.001196		
M	Dy < 0.017939	O	Mg 0.000067	M	Ru < 0.005980	M	U < 0.005980		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
 n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, HF and HNO₃. Avoid H₂SO₄. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Pb Containing Samples (Preparation and Solution) - Metal (Best dissolved in 1:1 H₂O / HNO₃); Oxides (The many different Pb oxides are soluble in HNO₃ with the exception of PbO₂ which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H₂O / HNO₃); Organic Matrices (Dry ash and dissolve in dilute HCl.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 $\mu\text{g/mL}$	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 $\mu\text{g/mL}$	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 $\mu\text{g/mL}$	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 29, 2013

11.2 Expiration Date

EXPIRES
01/2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY**11.1 Certification Issue Date**

July 29, 2013

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date**EXPIRES**

1A2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS**Certificate Prepared By:**

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

**CERTIFICATE OF ANALYSIS**

tel: 800.669.6799 - 540.585.3030

fax: 540.585.3012

info@inorganicventures.com

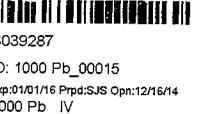
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

**2.0 PRODUCT DESCRIPTION**

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGPB1
Lot Number: G2-PB03044
Matrix: 0.5%(v/v) HNO3
Value/Analyte(s): 1 000 µg/mL Lead
Starting Material: Pb(NO3)2
Starting Material Lot#: 1717
Starting Material Purity: 99.9998%

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

Certified Value: 1,000 ± 3 µg/mL -weighted mean-
Certified Density: 1.002 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	998 ± 3 µg/mL ICP Assay NIST SRM 3128 Lot Number: 101026
Assay Method #2	1,002 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k(u^2_{char\ a\&b} + u^2_{bb} + u^2_{sts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{sts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag <	0.005980	M	Er <	0.014949	M	Mn <	0.011959	O	S <	0.100000	M	V <	0.005980
O	Al	0.000633	M	Eu <	0.008969	M	Mo <	0.005980	M	Sb <	0.001495	M	W <	0.029898
M	As <	0.029898	O	Fe	0.000500	O	Na <	0.006000	M	Sc <	0.029898	M	Y <	0.119592
M	Au <	0.008969	M	Ga <	0.002990	M	Nb <	0.001495	M	Se <	0.023918	M	Yb <	0.002990
O	B <	0.040000	M	Gd <	0.002990	M	Nd <	0.005980	O	Si <	0.003400	O	Zn <	0.000200
O	Ba	0.000500	M	Ge <	0.017939	O	Ni <	0.003000	M	Sm <	0.002990	M	Zr <	0.014949
M	Be <	0.001495	M	Hf <	0.005980	n	Os <		M	Sn <	0.014949			
O	Bi <	0.020000	O	Hg <	0.015000	O	P <	0.005000	O	Sr	0.000200			
O	Ca	0.000567	M	Ho <	0.001495	s	Pb <		M	Ta <	0.020929			
M	Cd <	0.008969	M	In <	0.029898	M	Pd <	0.014949	M	Tb <	0.000897			
M	Ce <	0.014949	M	Ir <	0.014949	M	Pr <	0.000897	M	Te <	0.089694			
M	Co <	0.008969	O	K	0.000167	M	Pt <	0.005980	M	Th <	0.002990			
M	Cr <	0.014949	M	La <	0.001495	M	Rb <	0.002990	M	Ti <	0.149490			
M	Cs <	0.000897	O	Li	0.000100	M	Re <	0.002990	O	Tl <	0.022000			
M	Cu <	0.017939	M	Lu <	0.001196	O	Rh <	0.009000	M	Tm <	0.001196			
M	Dy <	0.017939	O	Mg	0.000067	M	Ru <	0.005980	M	U <	0.005980			

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, HF and HNO₃. Avoid H₂SO₄. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, phosphate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Pb Containing Samples (Preparation and Solution) - Metal (Best dissolved in 1:1 H₂O / HNO₃); Oxides (The many different Pb oxides are soluble in HNO₃ with the exception of PbO₂ which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H₂O / HNO₃); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 - USA
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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030

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1.0 INORGANIC VENTURES is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

2.0 DESCRIPTION OF CRM

1000 µg/mL Selenium(+4) in 2% (v/v) HNO₃

Catalog Number:

CGSE(4)1-1, CGSE(4)1-2, and CGSE(4)1-5

Lot Number:

H2-SE02049

Starting Material:

Se Shot

Starting Material Purity (%):

99.9995

Starting Material Lot No:

1616

Matrix:

2% (v/v) HNO₃

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 1,000 ± 4 µg/mL weighted mean

Certified Density: 1.011 g/mL (measured at 20 ± 1°C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence interval using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Certified Value, X_{CRM}, where two methods of characterization are used, is the weighted mean of the two results = [(w_a) (X_a) + (w_b) (X_b)]

X_a is the mean of Assay Method A with standard uncertainty U_{char a}.

X_b is the mean of Assay Method B with standard uncertainty U_{char b}.

w_a and w_b = The weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/U_{char a})^2 / ((1/U_{char a})^2 + (1/U_{char b})^2);$$

$$w_b = (1/U_{char b})^2 / ((1/U_{char a})^2 + (1/U_{char b})^2)$$

CRM Expanded Uncertainty (±) = U_{CRM} = k (U_{char a}² + U_{char b}² + U_{ts}² + U_{sts}²)^{1/2}

U_{char a,b} = [(w_a)² (U_{char a})² + (w_b)² (U_{char b})²]^{1/2}; U_{char a} and U_{char b} are the square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume; k, coverage factor = 2 in all cases at Inorganic Ventures; U_{ts} = bottle to bottle homogeneity standard uncertainty; U_{sts} = long term stability standard uncertainty (storage); U_{st} = short term stability standard uncertainty (transportation).

Characterization of CRM by one method

Certified Value, X_{CRM}, where one method of characterization is used, is the mean of individual results:

X_a = Mean X_a is the mean of Assay Method A with standard uncertainty U_{char a}.

CRM Expanded Uncertainty (±) = U_{CRM} = k (U_{char a}² + U_{ts}² + U_{sts}²)^{1/2}

U_{char a} is the square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume; k, coverage factor = 2 in all cases at Inorganic Ventures; U_{ts} = bottle to bottle homogeneity standard uncertainty; U_{sts} = long term stability standard uncertainty (storage); U_{st} = short term stability standard uncertainty (transportation).

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

- "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
- This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 Assay Method #1 $999 \pm 5 \text{ }\mu\text{g/mL}$
ICP Assay NIST SRM 3149 Lot Number: 100901
Assay Method #2 $1,000 \pm 5 \text{ }\mu\text{g/mL}$
Calculated NIST SRM Lot Number: See Sec. 4.2

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP/MS AND ICP-OES IN $\mu\text{g/mL}$

CRM's solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

<u>O</u> Al < 0.005555	<u>M</u> Dy < 0.000370	<u>O</u> Li < 0.000067	<u>M</u> Pr < 0.000370	<u>M</u> Te < 0.037027
<u>M</u> Sb < 0.011108	<u>M</u> Er < 0.000370	<u>M</u> Lu < 0.000370	<u>M</u> Re < 0.000370	<u>M</u> Tb < 0.000370
<u>O</u> As < 0.005555	<u>M</u> Eu < 0.000370	<u>O</u> Mg < 0.000073	<u>M</u> Rh < 0.000370	<u>M</u> Tl < 0.000370
<u>O</u> Ba < 0.000333	<u>M</u> Gd < 0.000370	<u>O</u> Mn < 0.000222	<u>M</u> Rb < 0.001111	<u>M</u> Th < 0.003703
<u>O</u> Be < 0.000100	<u>M</u> Ga < 0.000370	<u>O</u> Hg < 0.002222	<u>M</u> Ru < 0.001851	<u>M</u> Tm < 0.000370
<u>O</u> Bi < 0.006666	<u>M</u> Ge < 0.001851	<u>O</u> Mo < 0.000556	<u>M</u> Sm < 0.000370	<u>O</u> Sn < 0.003333
<u>M</u> B < 0.007405	<u>M</u> Au < 0.000370	<u>M</u> Nd < 0.000370	<u>O</u> Sc < 0.000333	<u>O</u> Ti < 0.000444
<u>O</u> Cd < 0.000444	<u>M</u> Hf < 0.001851	<u>O</u> Ni < 0.003333	<u>s</u> Se	<u>O</u> W < 0.003333
<u>O</u> Ca < 0.000496	<u>M</u> Ho < 0.000370	<u>O</u> Nb < 0.001667	<u>O</u> Si < 0.000529	<u>M</u> U < 0.000370
<u>M</u> Ce < 0.000370	<u>M</u> In < 0.003703	<u>n</u> Os	<u>M</u> Ag < 0.000352	<u>M</u> V < 0.000370
<u>M</u> Cs < 0.000370	<u>M</u> Ir < 0.003703	<u>M</u> Pd < 0.003703	<u>O</u> Na < 0.002147	<u>M</u> Yb < 0.000370
<u>O</u> Cr < 0.001667	<u>O</u> Fe < 0.000208	<u>O</u> P < 0.002222	<u>O</u> Sr < 0.000078	<u>M</u> Y < 0.000370
<u>O</u> Co < 0.000889	<u>M</u> La < 0.000370	<u>M</u> Pt < 0.007405	<u>O</u> S < 0.007777	<u>O</u> Zn < 0.000073
<u>O</u> Cu < 0.000925	<u>M</u> Pb < 0.007405	<u>O</u> K < 0.000396	<u>M</u> Ta < 0.001851	<u>O</u> Zr < 0.001111

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
- For the validation of analytical methods
- For the preparation of "working reference samples"
- For interference studies and the determination of correction coefficients
- For detection limit and linearity studies
- For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipet from container. Do not return portions removed for pipetting to container.
Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96; +4; 6; H₂SeO₃
Chemical Compatibility - Soluble in HCl, HNO₃, H₃PO₄, H₂SO₄ and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.
Stability - 2-100 ppb levels- stable for months alone or mixed with other elements at equivalent levels - in 1 % HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Se Containing Samples (Preparation and Solution) - Metal (Soluble in HNO₃); Oxides (Readily soluble in water); Minerals and alloys (Acid digestion with HNO₃or HNO₃ / HF); Organic Matrices (Acid digestion with hot concentrated H₂SO₄ accompanied by the careful dropwise addition of H₂O₂ until clear)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 196.026 nm	0.08 / 0.006 $\mu\text{g/mL}$	1	atom	Fe
ICP-OES 203.985 nm	0.2 / 0.05 $\mu\text{g/mL}$	1	atom	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3 / 0.16 $\mu\text{g/mL}$	1	atom	Cr, Pt
ICP-MS 82 amu	200 ppt	n/a	M+	12C35Cl2

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION

- Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY

- This solution was mixed according to an in house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"

- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission

- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 31, 2014
Expiration Date:

EXPIRES
1A2016

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY**11.1 Certification Issue Date**

- November 20, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- November 20, 2017

- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS**Certificate Prepared By:**

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



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CERTIFICATE OF ANALYSIS

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**1.0 ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL1
Lot Number:	H2-TL02003R
Matrix:	0.7% v/v HNO ₃
Value/Analyte(s):	1 000 µg/mL Thallium
Starting Material:	TINO ₃
Starting Material Lot#:	1576
Starting Material Purity:	99.9996%

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

Certified Value:	1003 ± 7 µg/mL - no weighted mean
Certified Density:	1.003 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	1003 ± 6 µg/mL
ICP Assay NIST SRM 3158 Lot Number: 993012	

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse

square of the variance:

$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$\text{CRM/RM Expanded Uncertainty } (\pm t) = U_{CRM/RM} = k(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$$u_{char\ a\&b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2} \text{ where } u_{char\ a} \text{ and } u_{char\ b} \text{ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume}$$

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.005315	M Er < 0.013288	M Mn < 0.010631	O S < 0.030000	M V < 0.005315
O Al < 0.005000	M Eu < 0.007973	M Mo < 0.005315	M Sb < 0.001328	M W < 0.026577
M As < 0.026577	O Fe < 0.001000	O Na < 0.000100	M Sc < 0.026577	M Y < 0.106311
M Au < 0.007973	M Ga < 0.002657	M Nb < 0.001328	M Se < 0.021262	M Yb < 0.002657
O B < 0.001400	M Gd < 0.002657	M Nd < 0.005315	O Si < 0.003400	O Zn < 0.001054
M Ba < 0.026577	M Ge < 0.015946	O Ni < 0.000900	M Sm < 0.002657	M Zr < 0.013288
M Be < 0.001328	M Hf < 0.005315	n Os <	M Sn < 0.013288	
M Bi < 0.001063	O Hg < 0.012000	O P < 0.002600	M Sr < 0.001328	
O Ca < 0.000639	M Ho < 0.001328	M Pb < 0.003701	M Ta < 0.018604	
O Cd < 0.000794	M In < 0.026577	M Pd < 0.013288	M Tb < 0.000797	
M Ce < 0.013288	M Ir < 0.013288	M Pr < 0.000797	M Te < 0.079733	
M Co < 0.007973	O K < 0.001800	M Pt < 0.005315	M Th < 0.002657	
M Cr < 0.013288	M La < 0.001328	M Rb < 0.002657	M Ti < 0.132889	
M Cs < 0.000797	O Li < 0.000020	M Re < 0.002657	s Tl <	
M Cu < 0.015946	M Lu < 0.001063	M Rh < 0.002657	M Tm < 0.001063	
M Dy < 0.015946	O Mg < 0.000030	M Ru < 0.005315	M U < 0.005315	

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H₂O)61+

Chemical Compatibility - Soluble in HCl, HNO₃, and H₂SO₄. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Tl Containing Samples (Preparation and Solution) - Metal (Best dissolved in HNO₃ which forms chiefly the Tl¹⁺ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in PtO followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 $\mu\text{g/mL}$	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 $\mu\text{g/mL}$	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 $\mu\text{g/mL}$	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01



Reference Materials Producer
Cert #2495.01

SPExertificate®

Certificate of Reference Material



A2LA
ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: INT-B1

Lot No. 9-164YPY

Description: Analytes B

Matrix: 5% HNO₃

This ASSURANCE® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Measured	Uncertainty	SRM	Analyte	Labeled	Measured	Uncertainty	SRM
Ag	100 mg/L	101 mg/L	±0.5 mg/L	3151*	Be	50 mg/L	49.9 mg/L	±0.3 mg/L	3105a*
Cd	100 mg/L	101 mg/L	±0.5 mg/L	3108*	Co	50 mg/L	49.8 mg/L	±0.3 mg/L	3113*
Ni	100 mg/L	101 mg/L	±0.5 mg/L	3136*	Cr	50 mg/L	49.8 mg/L	±0.3 mg/L	3112a*
Pb	100 mg/L	100 mg/L	±0.5 mg/L	3128*	Cu	50 mg/L	50.0 mg/L	±0.3 mg/L	3114*
Zn	100 mg/L	100 mg/L	±0.5 mg/L	3168a*	Mn	50 mg/L	50.0 mg/L	±0.3 mg/L	3132*
Ba	.50 mg/L	50.8 mg/L	±0.3 mg/L	3104a*	V	50 mg/L	50.5 mg/L	±0.3 mg/L	3165*

* - indicates NIST SRM

† - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 7-166YP, 22-145JB



2432394
ID: ANALYTICS_B_00007
Exp:12/30/14 Ppd:SJS Opt:12/17/13
ICP ANALYTICS B SPEX

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability as well as transpiration loss. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification:

DEC 2013

Certifying Officer:

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements – certified by UL-DQS
- ISO 17025: General requirements for the competence of testing and calibration laboratories – accredited by A2LA
- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where x =measured value, U =expanded uncertainty
- $U = k u_C$ where $k=2$ is the coverage factor at the 95% confidence level
 U_C is obtained by combining the individual element standard uncertainty components u_i , and $u_C = \sqrt{\sum u_i^2}$

Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, Inc. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, Inc. be liable for any loss of profits or any incidental, special, or consequential damages.



Your Science is Our Passion.®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647



Standard Verification Form

Verification (New vendor or problematic Standard)	<input type="checkbox"/>	Re-Verification	<input checked="" type="checkbox"/>
TALS Reagent Record			
New	<input checked="" type="checkbox"/>	Copied	<input type="checkbox"/>
COA Reviewed against formulary report		<input checked="" type="checkbox"/>	

Document instrument verification if need (Initial or re-verification):			
Department	Acceptance Criteria		
	Standard Analytes	Poor Performers* and Esterified Analytes	
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb	
GCMS/LCMS	≤ 35 %D	≤ 55 %D	
MSVOA	≤ 25 %D	≤ 55 %D	
Metals	≤ 8 %D	NA	
Wet Chemistry	≤ 5 %D	NA	

Standard Name	Analytes B	Standard ID	Analytes B_0007	
Verified by	Chris Rhoades	Instrument ID	025	
Verification Date	12/30/14	Method Reference	6010B	
Reference Standard ID	ICAL1A_00450	Batch #	258819	
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
Analytes B	see raw data			
New Expiration Date:	06/30/15	New TALS ID	Analytes B_0008	
New expiration date can be no greater than ½ the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.				
Comment:	Original container 2432394 Reverified container 3052939			

1st Level Review Chris Rhoades Date: 12/31/14

2nd Level Review Doug Gomer Date: 1/19/15

QA Review (Re-verification only)	<u>msslein</u>	Date: <u>1/20/15</u>
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Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

*See analytical SOP for details on poor performing analytes.



Reagent ID: ANALYTES B_00008

Type:	ASTD	Expiration Date:	06/30/2015
Description:	ICP ANALYTES B SPEX	Laboratory:	TestAmerica Denver
No. of Bottles:	1	Prepared By:	Rhoades, Chris R
Storage Location:	ICP	Vendor:	SPEX
Reagent Volume:	125.000 mL	Vendor Lot #:	9-164ypy
Creation Date:	12/17/2013 -	Vendor Cat #:	INT-B1
Open Date:			
Container(s):	3052939 -		
Comment:			

original 2432394 **Reagent Analyte Information**

Analyte	Source ID <i>Reverified-</i>	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
Ag				100.00000	mg/L	
Ba				50.00000	mg/L	
Be				50.00000	mg/L	
Cd				100.00000	mg/L	
Co				50.00000	mg/L	
Cr				50.00000	mg/L	
Cu				50.00000	mg/L	
Mn				50.00000	mg/L	
Ni				100.00000	mg/L	
Pb				100.00000	mg/L	
V				50.00000	mg/L	
Zn				100.00000	mg/L	

*Needs
Reverification
Form, approved by QA
and Raw data*

Sample Name: analytes B-0007@100 Acquired: 12/30/2014 16:46:12 Type: Unk

Method: 6500_025(v13) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: Recertification

	Ag3280 328.068 {103}	Al1670 ppm	As1890 .00145	B_2089 .00668	Ba4554 .00392	Be3130 .51084 ✓	Bi2230 .45837 ✓	Ca3179 .00057	Cd2288 .00725
#1	.98711	.00130	.00342	.00406	.51491	.46215	-.00296	.00925	1.0010
#2	.99085	.00159	.00994	.00378	.50678	.45459	.00410	.00526	1.0010
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass 103.061114	Chk Pass 1.03	Chk Pass 100	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	105							98	
	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 W.51477 ✓	Fe2599 .50181 ✓	K_7664 .01265	Li6707 .12907	Mg2790 -.00305	Mn2576 .01042	Mo2020 .48976 ✓
#1	.52673	.51572	.50088	.01461	.16001	-.00549	.01599	.48928	.00016
#2	.52238	.51382	.50274	.01070	.09813	-.00061	.00485	.49025	.00010
Check ? High Limit Low Limit	Chk Pass .10000 -.01000	Chk Warn 103	Chk Pass 1.03	Chk Pass 106	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	106								
	Na5895 589.592 {57}	Ni2316 ppm	P_1782 1.0331 ✓	Pb2203 .00147	S_1820 1.0577 ✓	Sb2068 .00246	Se1960 -.00058	Si2881 -.00018	SiO2 -.02192
#1	.29892	1.0330	.00188	1.0630	.00355	.00097	.00176	-.02961	-.06336
#2	.26570	1.0332	.00106	1.0525	.00137	-.00212	-.00212	-.01422	-.03044
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	106							98	98
	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 -.00058	Ti3349 .00020	Tl1908 -.00032	U_3701 -.00237	V_2924 -.03570	Zn2062 .49452 ✓	Zr3391 .97853 ✓
#1	-.00139	.00017	-.00159	-.00022	-.00119	-.04648	.49458	.97690	.00087
#2	.00023	.00023	.00096	-.00054	-.00355	-.02493	.49446	.98015	.00266
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S						
Int. Std.	360.073 {94}	377.433 {89}							
Line Units									
Avg	3179.9	46754.	5049.1						
Stddev	8.8	60.	41.4						
%RSD	.27756	.12731	.81940						
#1	3173.7	46712.	5019.8						
#2	3186.2	46796.	5078.3						



Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material



A2LA
ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: INT-B1

Lot No. 9-164YPY

Description: Analytes B

Matrix: 5% HNO₃

This ASSURANCE® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Measured	Uncertainty	SRM	Analyte	Labeled	Measured	Uncertainty	SRM
Ag	100 mg/L	101 mg/L	±0.5 mg/L	3151*	Be	50 mg/L	49.9 mg/L	±0.3 mg/L	3105a*
Cd	100 mg/L	101 mg/L	±0.5 mg/L	3108*	Co	50 mg/L	49.8 mg/L	±0.3 mg/L	3113*
Ni	100 mg/L	101 mg/L	±0.5 mg/L	3136*	Cr	50 mg/L	49.8 mg/L	±0.3 mg/L	3112a*
Pb	100 mg/L	100 mg/L	±0.5 mg/L	3128*	Cu	50 mg/L	50.0 mg/L	±0.3 mg/L	3114*
Zn	100 mg/L	100 mg/L	±0.5 mg/L	3168a*	Mn	50 mg/L	50.0 mg/L	±0.3 mg/L	3132*
Ba	50 mg/L	50.8 mg/L	±0.3 mg/L	3104a*	V	50 mg/L	50.5 mg/L	±0.3 mg/L	3165*

* - indicates NIST SRM

† - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 7-166YP, 22-145JB

2432394
ID: ANALYTICS B_00007
Exp:12/30/14 Print: SJS Opt:12/17/13
ICP ANALYTICS B SPEX

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability as well as transpiration loss. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification:

DEC

2013

Certifying Officer:

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements – certified by UL-DQS
- ISO 17025: General requirements for the competence of testing and calibration laboratories – accredited by A2LA
- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where x =measured value, U =expanded uncertainty
 - $U = k u_C$ where $k=2$ is the coverage factor at the 95% confidence level
- U_C is obtained by combining the individual element standard uncertainty components u_i , and $u_C = \sqrt{\sum u_i^2}$

Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, Inc. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, Inc. be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep®

Your Science is Our Passion.®

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Phone: 1-800-LAB-SPEX • Fax: 732-603-9647





300 Technology Drive
Christiansburg, VA 24073 • USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

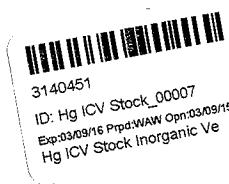
1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: MSHG-100PPM
Lot Number: H2-HG02113R
Matrix: 10% (v/v) HCl
Value/Analyte(s): 100 µg/mL Mercury
Starting Material: Hg metal
Starting Material Lot#: R307HGA1
Starting Material Purity: 100.0000%



3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: $100.01 \pm 0.64 \text{ } \mu\text{g/mL}$
Certified Density: 1.020 g/mL (measured at $20 \pm 1^\circ\text{C}$)

Assay Information:

Assay Method #1

ICP Assay NIST SRM 3133 Lot Number: 061204

Assay Method #2

EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [w_a(X_a) + w_b(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$CRM/RM Expanded Uncertainty (Δ) = $U_{CRM/RM} = k(u_{char\ a\&b}^2 + u_{bb}^2 + u_{lts}^2 + u_{sts}^2)^{1/2}$$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag < 0.004126	M	Er < 0.010315	M	Mn < 0.008252	O	S < 0.025000	M	V < 0.004126
O	Al < 0.000090	M	Eu < 0.006189	M	Mo < 0.004126	M	Sb < 0.001031	M	W < 0.020631
M	As < 0.020631	O	Fe < 0.001100	O	Na 0.000021	M	Sc < 0.020631	M	Y < 0.082527
M	Au < 0.006189	M	Ga < 0.002063	M	Nb < 0.001031	M	Se < 0.016505	M	Yb < 0.002063
M	B < 0.144423	M	Gd < 0.002063	M	Nd < 0.004126	O	Si < 0.003400	M	Zn < 0.041263
M	Ba < 0.020631	O	Ge < 0.018000	O	Ni < 0.001000	M	Sm < 0.002063	M	Zr < 0.010315
M	Be < 0.001031	M	Hf < 0.004126	n	Os <	M	Sn < 0.010315		
M	Bi < 0.000825	s	Hg <	O	P < 0.002600	M	Sr < 0.001031		
O	Ca 0.000024	M	Ho < 0.001031	M	Pb < 0.006189	M	Ta < 0.014442		
O	Cd < 0.004600	M	In < 0.020631	O	Pd < 0.003800	M	Tb < 0.000618		
M	Ce < 0.010315	M	Ir < 0.010315	M	Pr < 0.000618	M	Te < 0.061895		
M	Co < 0.006189	O	K < 0.002000	M	Pt < 0.004126	M	Th < 0.002063		
M	Cr < 0.010315	M	La < 0.001031	M	Rb < 0.002063	M	Ti < 0.103159		
M	Cs < 0.000618	O	Li < 0.000020	M	Re < 0.002063	O	Tl < 0.006000		
M	Cu < 0.012379	M	Lu < 0.000825	M	Rh < 0.002063	M	Tm < 0.000825		
M	Dy < 0.012379	O	Mg < 0.000030	M	Ru < 0.004126	M	U < 0.004126		

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference.
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO₃. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO₃ / LDPE container, stable in 10% HNO₃ packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO₃ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO₃ / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxide (Soluble in HNO₃); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

- December 10, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- December 10, 2017

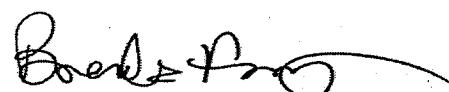
- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

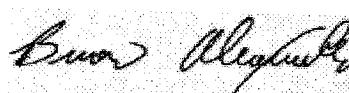
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Standard Verification Form

Verification (New vendor or problematic Standard)	<input type="checkbox"/>	Re-Verification	<input checked="" type="checkbox"/>
TALS Reagent Record			
New	<input type="checkbox"/>	Copied	<input checked="" type="checkbox"/>
COA Reviewed against formulary report		<input checked="" type="checkbox"/>	

Document instrument verification if need (Initial or re-verification):			
Department	Acceptance Criteria		
	Standard Analytes	Poor Performers* and Esterified Analytes	
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb	
GCMS/LCMS	≤ 35 %D	≤ 55 %D	
MSVOA	≤ 25 %D	≤ 55 %D	
Metals	≤ 8 %D	NA	
Wet Chemistry	≤ 5 %D	NA	

Standard Name	MSHG-100PPM	Standard ID	Hg ICV Stock_00007	
Verified by	WAW	Instrument ID		
Verification Date	3/9/15	Method Reference		
Reference Standard ID		Batch #		
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
New Expiration Date:		New TALS ID		
New expiration date can be no greater than ½ the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.				
Comment:	TALS container number: 3140451			

1st Level Review _____ WAW Date: 3/9/15

2nd Level Review _____ WAW Date: 3/9/15

QA Review (Re-verification only)		Date:
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Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

*See analytical SOP for details on poor performing analytes.

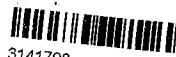
Certificate of Analysis



ULTRAGrade™ Solution
Mercury ICP / ICP-MS Standard
1000 µg/mL

Catalog Number: ICP-080
Lot Number: T00602
Job Number: J00018291
Lot Issue Date: 05/23/2014
Expiration Date: 06/30/2021

Starting Material: mercuric nitrate (*light sensitive*)
Starting Material Purity: 99.999%
Starting Material Lot #: NT00079
Matrix: 2% nitric acid in low TOC water (< 50 ppb)
Atomic Weight Hg: 200.61



3141798
ID: Hg Ultra Prim_00008
Exp:03/10/16 Prod:WAW Open:03/10/15
Ultra 1000 ppm Hg primar

Certified Value: $1001 \pm 2 \mu\text{g/mL}$

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO Guide 34 / ISO 17025 accredited laboratory, and compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Classical Wet Assay Method: Theoretical, based on gravimetric measurements

Confirmation by Inductively Coupled Plasma Spectroscopy (ICP / ICP/MS) vs. NIST SRM 3133

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & meticulously cleaned bottles in the manufacturing of ULTRAGrade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001.

Trace Metallic Impurities in Solution Standard in µg/mL:

*	Al	<0.005	ND	*	Ga	<0.005	ND	n	Nb		n	S	
*	Sb	<0.005	ND	n	Ge			n	Os		n	Ta	
*	As	<0.005	ND	n	Au			*	Pd	<0.005	ND	n	Te
*	Ba	<0.005	ND	n	Hf			*	P	<0.005	ND	n	Tb
*	Be	<0.005	ND	n	Ho			*	Pt	<0.005	ND	*	Tl
*	Bi	<0.005	ND	*	In	<0.005	ND	*	K	<0.005	ND	n	Th
*	B	<0.005	ND	n	Ir			n	Pr		n	Tm	
*	Cd	<0.005	ND	*	Fe	<0.005	ND	p	Re		*	Sn	
*	Ca	<0.005	ND	*	La	<0.005	ND	p	Rh		*	Ti	
n	Ce			*	Pb	<0.005	ND	p	Rb		p	W	
n	Cs			*	Li	<0.005	ND	p	Ru		p	U	
*	Cr	<0.005	ND	n	Lu			p	Sm		*	V	
*	Co	<0.005	ND	*	Mg	<0.005	ND	p	Sc		p	Yb	
*	Cu	<0.005	ND	*	Mn	<0.005	ND	*	Se	<0.005	ND	*	Y
n	Dy			s	Hg			*	Si	<0.005	ND	*	Zn
*	Er	<0.005	ND	*	Mo	<0.005	ND	*	Ag	<0.005	ND	n	Zr
*	Eu	<0.005	ND	n	Nd			*	Na	<0.005	ND		
*	Gd	<0.005	ND	*	Ni	<0.005	D	*	Sr	<0.005	ND		

* - element checked for
ND - not detected

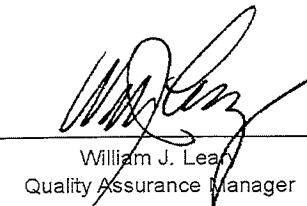
I - spectral interference
D - detected

n - not checked for
s - solution standard element

Density of Solution (measured at $20.00^\circ\text{C} \pm 0.05^\circ\text{C}$): 1.0100 g/mL



ISO 17025:2005 ISO 9001:2000
Accredited Registered
A2LA TUV USA, Inc.
Cert. No. 0851.01 Cert. No. 06-1004


William J. Leahy
Quality Assurance Manager

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY**11.1 Certification Issue Date**

August 08, 2014

11.2 Expiration Date

EXPIRES
01/08/2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS**Certificate Prepared By:**

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030

fax: 540.585.3012

info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

**2.0 PRODUCT DESCRIPTION**

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLDEN-STD-3B

Lot Number: H2-MEB541066

Matrix: 5% (v/v) HNO₃

Value / Analyte(s): 10 000 µg/mL ea:

K, 4 000 µg/mL ea:

Mg, 1 000 µg/mL ea:

Ca, Na, 500 µg/mL ea:

Fe, 200 µg/mL ea:

Li, P, 100 µg/mL ea:

Ag, Al, B, Ba, Be, Cd,

Co, Cr3, Cu, Mn, Ni, Sr,

V, Zn



2830399
ID: Icp cal std 3_00009
Exp:09/01/15 Prp:US Opt:08/18/14
ICP CAL STD 3B IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.7 µg/mL	Barium, Ba	100.0 ± 0.6 µg/mL	Beryllium, Be	100.0 ± 0.7 µg/mL
Boron, B	100.0 ± 0.7 µg/mL	Cadmium, Cd	100.0 ± 0.6 µg/mL	Calcium, Ca	1,000 ± 4 µg/mL
Chromium+3, Cr3	100.0 ± 0.5 µg/mL	Cobalt, Co	100.0 ± 0.5 µg/mL	Copper, Cu	100.0 ± 0.7 µg/mL
Iron, Fe	500.0 ± 2.3 µg/mL	Lithium, Li	200.0 ± 1.3 µg/mL	Magnesium, Mg	4,000 ± 18 µg/mL
Manganese, Mn	100.0 ± 0.5 µg/mL	Nickel, Ni	100.0 ± 0.5 µg/mL	Phosphorus, P	200.0 ± 1.0 µg/mL
Potassium, K	10,000.0 ± 40.0 µg/mL	Silver, Ag	100.0 ± 0.6 µg/mL	Sodium, Na	1,000 ± 4 µg/mL
Strontium, Sr	100.0 ± 0.6 µg/mL	Vanadium, V	100.0 ± 0.5 µg/mL	Zinc, Zn	100.0 ± 0.6 µg/mL

Certified Density: 1.072 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Sample Name: std 3 @100 Acquired: 8/19/2014 4:28:00 Type: Unk

Method: 6500_026(v14) Mode: CONC Corr. Factor: 1.000000

User: Scottsa Custom ID1: Custom ID2: Custom ID3:

Comment:

ICP Cal Std. 3
00009

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90075	1.1004	.00166	1.0353	1.0262	.92135	-.00020	9.5352	.98643
Stddev	.00043	.0007	.00197	.0028	.0061	.00517	.00140	.0496	.00011
%RSD	.04724	.05966	119.21	.27022	.59109	.56076	715.47	.51984	.01137
#1	.90105	1.1009	.00026	1.0373	1.0305	.92500	.00079	9.5703	.98651
#2	.90045	1.1000	.00305	1.0334	1.0219	.91769	-.00118	9.5002	.98635
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.01000								
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.552 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96187	.95221	.89997	4.2115	W 103.73	2.0466	35.550	.98436	.00028
Stddev	.00121	.00080	.00051	.0037	.49	.0109	.060	.00075	.00002
%RSD	.12557	.08408	.05704	.08847	.46983	.53098	.16778	.07612	8.0644
#1	.96273	.95277	.89961	4.2141	104.07	2.0543	35.592	.98489	.00026
#2	.96102	.95164	.90034	4.2088	103.38	2.0390	35.507	.98383	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.798	.94925	1.9360	-.00200	-.00035	.00924	-.00263	.00233	.00076
Stddev	.281	.00131	.0011	.00008	.00490	.00153	.00351	.02300	.00163
%RSD	2.1958	.13804	.05781	4.1668	1385.4	16.611	133.65	987.36	215.19
#1	12.996	.95017	1.9352	-.00206	-.00382	.00815	-.00511	.01859	-.00040
#2	12.599	.94832	1.9368	-.00194	.00311	.01032	-.00014	-.01394	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sr4077	Th2837	Tl3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391	339.198 { 99}
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}		ppm
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm		ppm
Avg	.96076	.03632	.00120	W -.01132	-.00569	.85472	.98672		-.00116
Stddev	.00415	.00001	.00032	.00072	.00241	.00134	.00201		.00182
%RSD	.43156	.03657	26.317	6.3828	42.420	.15703	.20405		157.25
#1	.96369	.03633	.00098	-.01081	-.00740	.85567	.98530		.00013
#2	.95783	.03631	.00143	-.01183	-.00398	.85377	.98814		-.00245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	5003.9	71245.	5044.2						
Stddev	6.3	215.	36.8						
%RSD	.12501	.30143	.72902						
#1	4999.5	71094.	5018.2						
#2	5008.3	71397.	5070.2						

Certificate of Analysis

Product Description:

Name: Intrepid ICVL
 Part Number: **SM-606-062**
Solution A
 Lot Number: **1430702**
 Matrix: 5% HNO₃
 Purity: 99.98% - 99.9999%



2984652
 ID: Icp ICVL A_00008
 Exp:11/05/15 Ppd:SJS Optn:11/11/14
 ICP ICVL SOLUTION A - H

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Al	25.00 ± 0.13	3101a	060502	Li	25.00 ± 0.15	3129a	100714
As	25.00 ± 0.25	3103a	100818	Mg	1000 ± 5	3131a	050302
Ba	25.00 ± 0.15	3104a	070222	Mn	25.00 ± 0.25	3132	050429
Be	25.00 ± 0.25	3105a	090514	Ni	25.00 ± 0.13	3136	120619
B	25.00 ± 0.13	3107	070514	K	2000 ± 10	*	
Cd	25.00 ± 0.13	3108	130116	Se	50.0 ± 0.5	3149	100901
Ca	200 ± 1	3109a	050825	Na	200 ± 1	3152a	120715
Cr	25.00 ± 0.13	3112a	030730	Sr	25.00 ± 0.13	3153a	990906
Co	25.00 ± 0.13	3113	000630	Tl	50.00 ± 0.25	3158	993012
Cu	25.00 ± 0.13	3114	121207	V	25.00 ± 0.15	3165	992706
Fe	25.00 ± 0.13	*		Zn	25.00 ± 0.13	3168a	120629
Pb	25.00 ± 0.15	3128	101026				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived

Lot No.: **1430702**

Rev. No.: 3.2.0

Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**

The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: November 3, 2014

Shipped Date: November 5, 2014

Expiration Date: November 5, 2015

Certificate Issue Date: November 3, 2014

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

A handwritten signature in black ink, appearing to read "Angel Sellers".

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: **1430702**

Rev. No.: 3.2.0

Page 2 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Sample Name: 2984652icvl a @10 Acquired: 11/13/2014 18:45:51 Type: Unk

Method: 6500_026(v6) Mode: CONC Corr. Factor: 1.000000

User: Scottsa Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	228.061 {451}	317.933 {106}	228.802 {447}	228.616 {447}	205.552 {464}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	2.5540 ✓	2.5940 ✓	2.6264 ✓	2.6162	2.6501 ✓	.00045	20.920 ✓	✓	2.5574 ✓	2.5432 ✓
Stddev	.00116	.0039	.0048	.0102	.0055	.0038	.00184	.030	.0049	.0043	.0018
%RSD	250.97	.15439	.18607	.38756	.20920	.14364	410.50	.14195	.18750	.17011	.07142
#1	-0.0128	2.5512	2.5906	2.6192	2.6124	2.6474	-.00085	20.899	2.6267	2.5543	2.5419
#2	.00036	2.5568	2.5974	2.6336	2.6201	2.6528	.00174	20.941	2.6337	2.5604	2.5445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -.00500	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Line	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5354	2.6511 ✓	✓	W 212.20 ✓	2.6336 ✓	104.18 ✓	✓	2.5930 ✓	-.00053	21.386 ✓	✓
Stddev	.0040	.0117	.34	.0094	.0094	.09	.0014	.00057	.685	.25164 ✓	.00367
%RSD	.15891	.43946	.15966	.35682	.08350	.05592	108.33	3.2012	.09651	71.476	.25903 ✓
#1	2.5326	2.6429	211.96	2.6270	104.24	2.5940	-.00012	20.902	2.5147	-.00553	2.5883
#2	2.5383	2.6593	212.44	2.6403	104.12	2.5920	-.00093	21.870	2.5182	-.00182	2.5923
Check ?	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Tl3349	Tl1908	U_3701	V_2924
Line	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04680	-.00093	W 5.1580	.04774	.00036	2.6116 ✓	.09766	.00426	W 5.0722 ✓	-.00564	2.6531
Stddev	.00633	.00023	.0006	.01833	.00134	.0056	.00049	.00021	.0070	.04454	.0018
%RSD	13.522	25.177	.01238	38.397	373.75	.21558	.49780	4.8611	.13821	789.06	.06700
#1	-.04232	-.00077	5.1575	.06070	.00130	2.6076	.09731	.00411	5.0672	-.03714	2.6543
#2	-.05127	-.00110	5.1584	.03478	-.00059	2.6155	.09800	.00440	5.0771	.02585	2.6518
Check ?	None	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Zn2062	Zr3391									
Line	206.200 {163}	339.198 {99}									
Units	ppm	ppm									
Avg	2.6108	-.00209									
Stddev	.0042	.00005									
%RSD	.15945	2.4553									
#1	2.6079	-.00212									
#2	2.6138	-.00205									
Check ?	Chk Pass	Chk Pass									
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Line	224.306 {450}	360.073 {94}	377.433 {89}								
Units	Cts/S	Cts/S	Cts/S								
Avg	3983.1	60832.	4448.0								
Stddev	10.5	102.	.1								
%RSD	.26264	.16819	.00331								
#1	3975.7	60904.	4447.9								
#2	3990.5	60760.	4448.1								

b. **Volumetric Device**

The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: March 18, 2014

Shipped Date: March 20, 2014

Expiration Date: March 20, 2015

Certificate Issue Date: March 19, 2014

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

A handwritten signature of "Angel Sellers" in black ink.

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: 1407732
Rev. No.: 3.2.0
Page 2 of 2

ISAB STD 1



ICP ISAB STD1

P.O. Box 41727
Charleston, SC 29428
Phone: (843) 767-7900
Fax: (843) 767-7906



2579930

ID: ICP ISAB STD1_00006
Exp:09/20/16 Ptpd:JS Opn:04/18/14
ICAP ICSAB STD 1 SOL A

Certificate of Analysis

Product Description:

Name: ICS-AB STD#1
Part Number: SM-606-037
Solution A
Lot Number: 1407732
Matrix: 20% HCl
Purity: 99.97% - 99.9999%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sb	100.0 ± 0.6	3102a	061229	P	200.0 ± 1.2	3139a	060717
As	200 ± 2	3103a	100818	K	5000 ± 25	3141a	051220
B	200.0 ± 1.2	3107	070514	Se	500 ± 5	3149	100901
Li	100.0 ± 0.6	3129a	100714	Na	5000 ± 25	3152a	120715
Mo	100.0 ± 0.6	3134	891307	Sr	100.0 ± 0.5	3153a	990906

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

Lot No.: 1407732

Rev. No.: 3.2.0

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High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Sample Name: isab 1@100 Acquired: 4/26/2014 5:43:46 Type: Unk

Method: 6500_026(v80) Mode: CONC Corr. Factor: 1.000000

User: Scottsa Custom ID1: Custom ID2: Custom ID3:

Comment:

-00004 4/18/14

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	-.01004	.00273	.01443	.00171	.00001	-.00393	-.00238	-.00018
Stddev	.00060	.00034	.00171	.00010	.00052	.00007	.00079	.01050	.00008
%RSD	130.25	3.3736	62.864	.72146	30.547	469.71	20.017	441.56	42.750
#1	.00004	-.00980	.00151	.01450	.00208	-.00003	-.00337	.00505	-.00023
#2	.00089	-.01028	.00394	.01435	.00134	.00006	-.00449	-.00980	-.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.552 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 { 50}	Mg2790 279.079 {121}	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.00020	-.00089	-.01613	.32360	.00061	.00847	.00005	-.00032
Stddev	.00033	.00042	.00008	.00286	.07919	.00326	.00134	.00002	.00031
%RSD	141.68	212.19	8.7043	17.749	24.472	534.35	15.847	40.184	98.071
#1	-.00000	-.00010	-.00084	-.01816	.37960	-.00170	.00942	.00003	-.00010
#2	.00047	.00049	-.00095	-.01411	.26761	.00292	.00752	.00006	-.00054
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na5895 589.592 { 57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	Sn1899 189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52359	.00384	.02106	.00108	.12888	-.00043	.00008	-.00518	.00618
Stddev	.01207	.00063	.00128	.00021	.00436	.00114	.00041	.01599	.00064
%RSD	2.3051	16.504	6.0577	19.465	3.3866	266.41	530.28	308.76	10.328
#1	.53212	.00429	.02196	.00123	.13196	.00038	-.00021	-.01649	.00573
#2	.51505	.00340	.02016	.00094	.12579	-.00124	.00037	.00613	.00664
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sr4077 407.771 { 83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 { 91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00019	-.00107	-.00022	W 11.230	.02192	.00075	-.00038	-.00225	
Stddev	.00021	.00031	.00067	.017	.00271	.00102	.00047	.00280	
%RSD	108.33	28.675	300.63	.15470	12.375	136.28	123.53	124.45	
#1	-.00004	-.00129	-.00070	11.218	.02384	.00003	-.00005	-.00027	
#2	-.00034	-.00085	.00025	11.243	.02000	.00147	-.00071	-.00422	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line	Y_2243 224.306 {450}	Y_3600 360.073 { 94}	Y_3774 377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	4146.6	57639.	3109.6						
Stddev	5.1	320.	11.1						
%RSD	.12341	.55600	.35597						
#1	4150.2	57866.	3101.8						
#2	4143.0	57413.	3117.4						

Sample Name: 3015802LLCCV-1 Acquired: 12/3/2014 12:51:54 Type: Unk

Method: 6500_026 Mode: CONC Corr. Factor: 1.000000

User: L. Diaz Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280 ✓	Al3092 ✓	As1890 ✓	B_2089	Ba4554 ✓	Be3130 ✓	Bi2230 ✓	Ca3179 ✓	Cd2288 ✓
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1.0113	10.136	1.6495	.02362	1.0744	.10175	W 10.908	20.397	.53116
Stddev	.0097	.011	.0022	.00025	.0006	.0004	.007	.032	.00116
%RSD	.95697	.10815	.13575	1.0460	.05727	.03580	.06608	.15789	.21796
#1	1.0181	10.129	1.6510	.02379	1.0739	.10172	10.903	20.420	.53034
#2	1.0044	10.144	1.6479	.02344	1.0748	.10177	10.914	20.374	.53198
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass				
High Limit	.10000						3.0000		
Low Limit	-.01000						-.01000		
Elem	Co2286 ✓	Cr2055 ✓	Cu3247 ✓	Fe2599 ✓	K_7664 ✓	Li6707 ✓	Mg2790 ✓	Mn2576 ✓	Mo2020 ✓
Line	228.616 {447}	205.552 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0346	1.0460	1.5581	9.6578	W 329.44	1.1027	20.223	1.0134	-.00126
Stddev	.0011	.0025	.0053	.0101	.61	.0013	.005	.0010	.00013
%RSD	.10460	.23809	.34201	.10468	.18657	.11733	.02371	.09591	10.270
#1	1.0338	1.0442	1.5619	9.6649	329.88	1.1037	20.219	1.0127	-.00117
#2	1.0354	1.0478	1.5544	9.6506	329.01	1.1018	20.226	1.0141	-.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				
Elem	Na8183 ✓	Ni2316 ✓	P_1782	Pb2203 ✓	S_1820	Sb2068	Se1960 ✓	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	115.03	4.0783	-.00540	.93896	.15112	-.00824	1.6559	.00849	.00787
Stddev	.72	.0042	.00066	.00391	.00610	.00208	.0057	.00218	.00062
%RSD	.62737	.10344	12.141	.41649	4.0365	25.220	.34713	25.721	7.8174
#1	114.52	4.0754	-.00494	.94173	.15544	-.00677	1.6600	.01004	.00743
#2	115.54	4.0813	-.00587	.93620	.14681	-.00971	1.6519	.00695	.00830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sr4077 ✓	Th2837 ✓	Tl3349	Tl1908 ✓	U_3701 ✓	V_2924 ✓	Zn2062 ✓	Zr3391	
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0580	1.5732	-.00715	1.5107	6.5253	1.0422	2.0700	.03655	
Stddev	.0006	.0014	.00010	.0049	.0227	.0019	.0074	.00198	
%RSD	.05448	.09032	1.4025	.32597	.34827	.18286	.35719	5.4268	
#1	1.0584	1.5722	-.00722	1.5072	6.5092	1.0409	2.0648	.03515	
#2	1.0576	1.5742	-.00708	1.5142	6.5414	1.0436	2.0753	.03795	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3890.7	76156.	5820.2						
Stddev	4.3	322.	14.8						
%RSD	.11072	.42297	.25393						
#1	3893.7	76384.	5809.8						
#2	3887.6	75929.	5830.7						



300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: ICP-LLCCV-1

Lot Number: H2-MEB534141

Matrix: 5% (v/v) HNO₃

Value / Analyte(s): 300 µg/mL ea:

K,

100 µg/mL ea:

Na,

20 µg/mL ea:

Ca, Mg,

10 µg/mL ea:

Al, Bi,

6 µg/mL ea:

U,

4 µg/mL ea:

Ni,

2 µg/mL ea:

Zn,

1.5 µg/mL ea:

As, Cu, Se,

Th, Tl,

1 µg/mL ea:

Ag, Ba, Co,

Cr3, Li, Mn,

Sr, V,

0.9 µg/mL ea:

Pb,

0.5 µg/mL ea:

Cd,

0.1 µg/mL ea:

Be

3.0 CERTIFIED VALUES AND UNCERTAINTIES

3015802
ID: ICP LLCCV-1_00025
Exp:12/01/15 Ppt&SUS Opn:12/01/14
ICP LLCCV STD 1 IV

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum	10.00 ± 0.05 µg/mL	Arsenic	1.505 ± 0.009 µg/mL
Barium	0.998 ± 0.005 µg/mL	Beryllium	0.0998 ± 0.0006 µg/mL
Bismuth	9.97 ± 0.05 µg/mL	Cadmium	0.5014 ± 0.0023 µg/mL
Calcium	20.07 ± 0.09 µg/mL	Chromium+3	1.000 ± 0.005 µg/mL
Cobalt	0.998 ± 0.005 µg/mL	Copper	1.500 ± 0.007 µg/mL
Iron	10.00 ± 0.05 µg/mL	Lead	0.900 ± 0.005 µg/mL
Lithium	1.000 ± 0.007 µg/mL	Magnesium	20.08 ± 0.10 µg/mL
Manganese	0.998 ± 0.004 µg/mL	Nickel	3.990 ± 0.020 µg/mL
Potassium	300.2 ± 1.4 µg/mL	Selenium	1.503 ± 0.007 µg/mL
Silver	1.000 ± 0.004 µg/mL	Sodium	100.0 ± 1.0 µg/mL
Strontium	0.996 ± 0.004 µg/mL	Thallium	1.500 ± 0.007 µg/mL
Thorium	1.501 ± 0.008 µg/mL	Uranium	6.006 ± 0.029 µg/mL
Vanadium	1.001 ± 0.006 µg/mL	Zinc	2.001 ± 0.010 µg/mL

Certified Density: 1.022 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999a	999a
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	010713
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	892707
Bi	Calculated		See Sec. 4.2
Bi	ICP Assay	3106	991212
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3181	000630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	000505
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	030721
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	992106
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Th	ICP Assay	3159	992912
Th	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
U	Calculated		See Sec. 4.2
U	ICP Assay	3164	891509
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Certified Value (\bar{x}) = $\frac{\sum x_i}{n}$

(\bar{x}) = mean
 x_i = individual results
n = number of measurements

Uncertainty (\pm) = $2 [\sum (s_i)^2]^{\frac{1}{2}}$

2 = the coverage factor.
[$\sum (s_i)^2$] $^{\frac{1}{2}}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.29 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.
- Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.
- Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 12, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
01/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Sample Name: 3053246@100 Acquired: 12/31/2014 18:36:42 Type: Unk
 Method: 6500_026(v8) Mode: CONC Corr. Factor: 1.000000
 User: Scottsa Custom ID1: 100X Custom ID2: Custom ID3:
 Comment: STDDEN-PDS-1

STDDEN-PDS-1
 ICP-00070

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}	228.616 {447}	205.552 {464}	324.754 {104}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05125	1.0190	.20476	-.00158	.10832	.04997	.00343	19.986	.05074	.05092	.05055	.05243
Stddev	.00004	.0010	.00126	.00068	.00025	.00010	.00172	.034	.00035	.00039	.00032	.00030
%RSD	.08754	.09930	.61668	43.126	.22838	.20630	.50.064	.17043	.68885	.76021	.62438	.57798
#1	.05128	1.0183	.20565	-.00206	.10849	.04989	.00222	19.962	.05099	.05119	.05033	.05265
#2	.05121	1.0198	.20386	-.00110	.10814	.05004	.00464	20.011	.05050	.05065	.05078	.05222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												
Elem	Fe2599	K_7664	L16707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Line	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}	257.610 {131}	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0164	21.166	.10830	19.451	.05047	-.00034	23.057	.05049	2.0426	.10147	.05437	.00126
Stddev	.0063	.001	.00196	.023	.00005	.00042	.247	.00080	.0111	.00045	.00349	.00130
%RSD	.61748	.00489	1.8905	.11710	.10428	122.87	1.0726	1.5928	.54352	.44781	6.4183	102.81
#1	1.0119	21.167	.10692	19.467	.05044	-.00005	22.882	.05106	2.0504	.10179	.05684	.00218
#2	1.0208	21.165	.10969	19.435	.05051	-.00064	23.232	.04992	2.0347	.10115	.05190	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391	
Line	196.090 {472}	288.158 {117}	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	
Units	ppm											
Avg	.20445	.03085	-.00071	.05365	.20045	-.00076	.20689	.51764	.04984	.19627	.00456	
Stddev	.00488	.03424	.00014	.00013	.00172	.00047	.00119	.04321	.00010	.00026	.00021	
%RSD	2.3856	110.96	19.638	.23896	.85914	62.279	.57379	8.3484	.19602	.13003	4.5491	
#1	.20100	.00665	-.00061	.05374	.20167	-.00109	.20605	.54819	.04977	.19609	.00471	
#2	.20790	.05506	-.00081	.05356	.19924	-.00042	.20773	.48708	.04991	.19645	.00441	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												
Int. Std.	Y_2243	Y_3600	Y_3774									
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cls/S	Cls/S	Cls/S						
Units	Cts/S	Cts/S	Cts/S									
Avg	3870.4	68357.	4147.2									
Stddev	23.3	122.	3.5									
%RSD	.60190	.17846	.08375									
#1	3886.9	68271.	4144.7									
#2	3854.0	68443.	4149.6									



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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: STLDEN-PDS-1
Lot Number: H2-MEB546062
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 2 000 µg/mL ea:
Ca, K, Mg,
Na,
200 µg/mL ea:
P,
100 µg/mL ea:
Al, Fe,
50 µg/mL ea:
U,
20 µg/mL ea:
As, Se, Th,
Tl, Zn,
10 µg/mL ea:
Ba, Li, Pb,
5 µg/mL ea:
Ag, Be, Cd,
Co, Cr3, Cu,
Mn, Ni, Sr,
V

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum	100.0 ± 0.5 µg/mL	Arsenic	20.00 ± 0.13 µg/mL
Barium	10.00 ± 0.06 µg/mL	Beryllium	5.000 ± 0.028 µg/mL
Cadmium	5.001 ± 0.032 µg/mL	Calcium	2.000 ± 9 µg/mL
Chromium+3	5.000 ± 0.028 µg/mL	Cobalt	5.001 ± 0.032 µg/mL
Copper	5.001 ± 0.032 µg/mL	Iron	100.0 ± 0.5 µg/mL
Lead	10.00 ± 0.05 µg/mL	Lithium	10.00 ± 0.05 µg/mL
Magnesium	2 000 ± 9 µg/mL	Manganese	5.001 ± 0.028 µg/mL
Nickel	5.001 ± 0.028 µg/mL	Phosphorus	200.0 ± 1.0 µg/mL
Potassium	2 000 ± 9 µg/mL	Selenium	20.00 ± 0.11 µg/mL
Silver	5.001 ± 0.036 µg/mL	Sodium	2 000 ± 9 µg/mL
Strontium	4.999 ± 0.032 µg/mL	Thallium	20.00 ± 0.13 µg/mL
Thorium	20.00 ± 0.11 µg/mL	Uranium	50.00 ± 0.36 µg/mL
Vanadium	4.999 ± 0.032 µg/mL	Zinc	20.00 ± 0.11 µg/mL

Certified Density: 1.041 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	060502
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Th	ICP Assay	3159	992912
Th	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
U	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where's stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.21 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.
- Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.
- Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
01/2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 • USA
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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLDEN-PDS-1

Lot Number: H2-MEB546062

Matrix: 3% (v/v) HNO₃

Value / Analyte(s): 2 000 µg/mL ea:

Ca, K, Mg, Na,

200 µg/mL ea:

P,

100 µg/mL ea:

Al, Fe,

50 µg/mL ea:

U,

20 µg/mL ea:

As, Se, Th, Tl,

Zn,

10 µg/mL ea:

Ba, Li, Pb,

5 µg/mL ea:

Ag, Be, Cd,

Cr3, Cu, Mn,

Sr, V Co,

Ni,

3.0 CERTIFIED VALUES AND UNCERTAINTIES



3167000
ID: ICP PDS 1_00011
Exp:04/01/16 Prd:SJS Opn:03/24/15
ICP PDS 1 IV

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Arsenic, As	20.00 ± 0.13 µg/mL
Barium, Ba	10.00 ± 0.06 µg/mL	Beryllium, Be	5.000 ± 0.028 µg/mL
Cadmium, Cd	5.001 ± 0.032 µg/mL	Calcium, Ca	2.000 ± 9 µg/mL
Chromium+3, Cr3	5.000 ± 0.028 µg/mL	Cobalt, Co	5.001 ± 0.032 µg/mL
Copper, Cu	5.001 ± 0.032 µg/mL	Iron, Fe	100.0 ± 0.5 µg/mL
Lead, Pb	10.00 ± 0.05 µg/mL	Lithium, Li	10.00 ± 0.05 µg/mL
Magnesium, Mg	2.000 ± 9 µg/mL	Manganese, Mn	5.001 ± 0.028 µg/mL
Nickel, Ni	5.001 ± 0.028 µg/mL	Phosphorus, P	200.0 ± 1.0 µg/mL
Potassium, K	2.000 ± 9 µg/mL	Selenium, Se	20.00 ± 0.11 µg/mL
Silver, Ag	5.001 ± 0.036 µg/mL	Sodium, Na	2.000 ± 9 µg/mL
Strontium, Sr	4.999 ± 0.032 µg/mL	Thallium, Tl	20.00 ± 0.13 µg/mL
Thorium, Th	20.00 ± 0.11 µg/mL	Uranium, U	50.00 ± 0.36 µg/mL
Vanadium, V	4.999 ± 0.032 µg/mL	Zinc, Zn	20.00 ± 0.11 µg/mL

Certified Density: 1.041 g/mL (measured at 20 ± 1 °C)

Assay Information:

Certified Value (\bar{x}) = $\frac{\sum x_i}{n}$

(\bar{x}) = mean
 x_i = individual results

n = number of measurements

Uncertainty (\pm) = $2 [\sum (s_i)^2]^{1/2}$

2 = the coverage factor.

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where s stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.21 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2014

11.2 Expiration Date

EXPIRES

1 R 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	060502
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Th	ICP Assay	3159	992912
Th	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
U	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.



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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: STLDEN-RL-2A
Lot Number: F2-MEB425129
Matrix: tr. HF
1.4% (v/v) HNO₃
Value / Analyte(s): 500 µg/mL ea:
Si,
20 µg/mL ea:
Sn,
10 µg/mL ea:
Mo, Ti, Zr

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Molybdenum, Mo	10.00 ± 0.06 µg/mL	Silicon, Si	500.3 ± 2.4 µg/mL	Tin, Sn	20.01 ± 0.13 µg/mL
Titanium, Ti	10.00 ± 0.07 µg/mL	Zirconium, Zr	10.00 ± 0.06 µg/mL		

Certified Density: 1.006 g/mL (measured at 20 ± 1 °C)

Assay Information:

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
Zr	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	071226

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n} \quad (\bar{x}) = \text{mean}$$

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.

[∑ (s_i)²]^{1/2} = The square root of the sum of the squares of the most common errors (where's stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMS.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 13, 2012

11.2 Expiration Date

EXPIRES

01/06/2015

11.3 Period of Validity

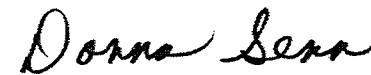
- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0

NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Sample Name: 2812789 Acquired: 12/20/2014 11:46:15 Type: Unk

Method: 6500_026(v4) Mode: CONC Corr. Factor: 1.000000

User: L. Trudell Custom ID1: Custom ID2: Custom ID3:

Comment: rl3a

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}
Units	ppm	ppm	ppm	ppm	ppm
Avg	W 1.8890 94	20.490	.00523	19.643 98	1.0389
Stddev	.0075	.153	.00033	.099	.0038
%RSD	.39869	.74612	6.3653	.50357	.37001

#1	1.8943	20.382	-.00499	19.713	1.0362
#2	1.8836	20.598	-.00546	19.573	1.0416

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000				
Low Limit	-.01000				

Elem	Be3130	Bi2230	Ca3179	Cd2288	Co2286
Line	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	.19820 91	-.00129	40.362 0	1.0486 10	.99051 99
Stddev	.00098 91	.00044	.163	.0063	.00584
%RSD	.49453	33.643	.40318	.60135	.58939

#1	.19751	-.00099	40.247	1.0530	.99464
#2	.19890	-.00160	40.477	1.0441	.98639

Check ?	Chk Pass				
High Limit					
Low Limit					

Elem	Cr2055	Cu3247	Fe2599	K_7664	Li6707
Line	205.552 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.9674 98	2.0258 0	6.0711 0	W 203.03 02	2.1009 02
Stddev	.0121	.0049	.0327	.81	.0080
%RSD	.61300	.24030	.53893	.40138	.38182

#1	1.9759	2.0292	6.0480	202.45	2.0952
#2	1.9588	2.0223	6.0943	203.61	2.1066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				100.00	
Low Limit				-.50000	

verified

Sample Name: 2812789 Acquired: 12/20/2014 11:46:15 Type: Unk

Method: 6500_026(v4) Mode: CONC Corr. Factor: 1.000000

User: L. Trudell Custom ID1: Custom ID2: Custom ID3:

Comment: rl3a

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	38.355 <i>q6</i>	.59806 <i>10</i>	.00010	210.62 <i>15</i>	1.9892 <i>79</i>
Stddev	.114	.00132	.00002	.74	.0109
%RSD	.29692	.22113	20.482	.35340	.54906

#1	38.435	.59900	.00009	210.09	1.9969
#2	38.274	.59713	.00012	211.14	1.9814

Check ?	Chk Pass				
High Limit					
Low Limit					

Elem	P_1782	Pb2203	S_1820	Sb2068	Se1960
Line	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm
Avg	F 183.34 <i>q2</i>	.00359	-.05650	W -.01075	-.00447
Stddev	.97	.00165	.00199	.00116	.00543
%RSD	.52996	46.064	3.5152	10.811	121.34

#1	184.03	.00242	-.05510	-.00993	-.00831
#2	182.66	.00476	-.05791	-.01157	-.00064

Check ?	Chk Fail	Chk Pass	None	Chk Warn	Chk Pass
High Limit	50.000			2.0000	
Low Limit	-2.0000			-.01000	

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
Units	ppm	ppm	ppm	ppm	ppm
Avg	.21567	.00164	1.0231 <i>10</i>	1.8709 <i>q4</i>	-.00480
Stddev	.03681	.00072	.0045	.0108	.00099
%RSD	17.070	44.130	.44303	.57915	20.578

#1	.24170	.00215	1.0199	1.8785	-.00550
#2	.18964	.00113	1.0263	1.8632	-.00410

Check ?	Chk Pass				
High Limit					
Low Limit					

Sample Name: 2812789 Acquired: 12/20/2014 11:46:15 Type: Unk

Method: 6500_026(v4) Mode: CONC Corr. Factor: 1.000000

User: L. Trudell Custom ID1: Custom ID2: Custom ID3:

Comment: rl3a

Elem	TI1908	U_3701	V_2924	Zn2062	Zr3391
Line	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.00724	12.132	1.9825	2.0200	.02419
Stddev	.00048	.008	.0052	.0071	.00095
%RSD	6.6550	.06276	.26068	.35219	3.9391

#1	-.00690	12.126	1.9861	2.0250	.02352
#2	-.00758	12.137	1.9788	2.0150	.02487

Check ?	Chk Pass				
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	5589.2	95190.	8299.9
Stddev	11.9	325.	25.8
%RSD	.21262	.34184	.31033
#1	5580.8	94960.	8318.2
#2	5597.6	95420.	8281.7



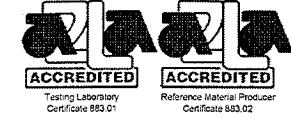
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: STLDEN-RL-1A
Lot Number: G2-MEB481018
Matrix: tr. HF
Value / Analyte(s): 10 mg/L ea:
As, Sb, Se, Ti,
3 mg/L ea:
Pb

2812400
ID: ICP RL STD 1A_00008
Exp: 08/01/15 PPD: LMT Oph: 08/08/13
ICP RL STD 1A

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.06 mg/L	Arsenic, As	10.00 ± 0.06 mg/L	Lead, Pb	3.000 ± 0.020 mg/L
Selenium, Se	10.00 ± 0.07 mg/L	Thallium, Ti	10.00 ± 0.06 mg/L		

Certified Density: 1.006 g/mL (measured at 20 ± 1 °C)

Assay Information:

ELEMENT	METHOD	NIST SRM#	SRM LOT#
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{\frac{1}{2}}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{\frac{1}{2}}$ = The square root of the sum of the squares of the most common errors (where's stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 14, 2013

11.2 Expiration Date

EXPIRES

01st 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R. Gaines

RL STD 1A - 00008

Sample Name: RL STD 1A@10 Acquired: 12/31/2014 16:06:11 Type: Unk

Method: 6500_026(v8) Mode: CONC Corr. Factor: 1.000000

User: Scottsa Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}	228.616 {447}	205.552 {464}	324.754 {104}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	.00455	.99663	.00388	.00004	-.00015	.00453	.00884	-.00477	.00002	.00020	.00028
Stddev	.00012	.00133	.00127	.00052	.00074	.00009	.00398	.00204	.00019	.00022	.00001	.00014
%RSD	16.629	29.322	.12766	13.332	1978.7	60.273	87.847	23.119	3.8860	931.69	7.1480	51.668

#1	-.00079	.00550	.99753	.00352	.00056	-.00022	.00734	.00740	-.00464	.00013	.00021	.00038
#2	-.00062	.00361	.99573	.00425	-.00048	-.00009	.00171	.01029	-.00490	.00018	.00019	.00018

Check ?	Chk Pass											
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Line	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}	257.610 {131}	202.030 {467}	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00550	.03147	-.00377	.00693	.00010	-.00010	-.01416	.00025	.00281	.32173	.00109	1.0519
Stddev	.00409	.09421	.00471	.00160	.00004	.00010	.01399	.00047	.00301	.00125	.00292	.0029
%RSD	74.303	299.39	124.91	23.028	44.300	93.870	98.826	187.65	107.26	.38745	268.97	.27851

#1	.00261	.09808	-.00044	.00806	.00013	-.00017	-.02406	.00059	.00493	.32261	-.00098	1.0498
#2	.00839	-.03515	-.00711	.00580	.00007	-.00003	-.00427	-.00008	.00068	.32085	.00315	1.0539

Check ?	Chk Pass	None	Chk Pass									
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	J_3701	V_2924	Zn2062	Zr3391
Line	196.090 {472}	288.158 {117}	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0113	.04786	.00017	.00006	-.00008	.00003	1.0865	-.02732	-.00077	.00109	-.00004
Stddev	.0083	.00114	.00149	.00001	.00253	.00059	.0012	.02282	.00017	.00035	.00036
%RSD	.81890	2.3789	902.12	21.188	3368.0	1706.9	.11312	83.511	21.874	31.923	939.95

#1	1.0055	.04705	.00122	.00005	-.00186	-.00038	1.0857	-.04346	-.00089	.00085	-.00029
#2	1.0172	.04866	-.00089	.00007	.00171	.00045	1.0874	-.01119	-.00065	.00134	.00021

Check ?	Chk Pass										
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Line	224.306 {450}	360.073 {94}	377.433 {89}									
Units												
Avg	4102.1	73128.	4424.0									
Stddev	20.7	222.	21.9									
%RSD	.50439	.30305	.49395									

#1	4116.7	73285.	4439.5									
#2	4087.4	72972.	4408.6									

102%

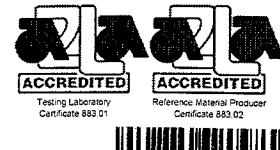
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12/31/14

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



3253592
 ID: ICP SPK 2B_00025
 Exp:06/01/16 Prep:CGG Opn:05/05/15
 ICP PREP SPIKE 2B

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: TA-ICP-SPK-2B
 Lot Number: H2-MEB546154
 Matrix: 5% (v/v) HNO₃
 0.5% (v/v) HF
 Value / Analyte(s): 1 000 µg/mL ea:
 Si,
 200 µg/mL ea:
 S, Sn,
 100 µg/mL ea:
 B, Mo, Ti,
 50 µg/mL ea:
 Sb, Zr

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	50.00 ± 0.38 µg/mL	Boron, B	100.0 ± 0.7 µg/mL	Molybdenum, Mo	100.0 ± 0.6 µg/mL
Silicon, Si	1 000 ± 8 µg/mL	Sulfur, S	200.0 ± 1.1 µg/mL	Tin, Sn	200.0 ± 0.9 µg/mL
Titanium, Ti	100.0 ± 0.7 µg/mL	Zirconium, Zr	50.00 ± 0.28 µg/mL		

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Mo	ICP Assay	3134	891307
S	ICP Assay	3154	892205
S	Acidimetric	84L	84L
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
Zr	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	071226

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.1 Certification Issue Date

October 10, 2014

11.2 Expiration Date

EXPIRES

1 ~~1~~ 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



3253590

ID: ICP SPK 3A_00097
Exp:06/01/16 Prpdc:GGG Cprn:05/05/15
ICP PREP SPIKE 3A IV**2.0 PRODUCT DESCRIPTION**

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: STLDEN-SPK-3A
Lot Number: J2-MEB571140
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 5 000 µg/mL ea:
Ca, K, Mg, Na,
1 000 µg/mL ea:
P,
200 µg/mL ea:
Al, Ba, Bi, Se,
Tl, U,
100 µg/mL ea:
As, Fe, Li, Sr,
Th,
50 µg/mL ea:
Co, Mn, Ni, Pb,
V, Zn,
25 µg/mL ea:
Cu,
20 µg/mL ea:
Cr₃,
10 µg/mL ea:
Cd,
5 µg/mL ea:
Ag, Be

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	METHOD	NIST SRM#	SRM LOT#
Aluminum, Al	200.0 ± 1.0 µg/mL	Arsenic, As	100.0 ± 0.8 µg/mL	Ag	ICP Assay	3151	992212
Barium, Ba	199.9 ± 1.0 µg/mL	Beryllium, Be	5.000 ± 0.028 µg/mL	Ag	Volhard	999b	999b
Bismuth, Bi	200.0 ± 1.2 µg/mL	Cadmium, Cd	10.00 ± 0.05 µg/mL	Al	ICP Assay	3101a	060502
Calcium, Ca	5 000 ± 23 µg/mL	Chromium+3, Cr3	20.00 ± 0.10 µg/mL	Al	EDTA	928	928
Cobalt, Co	50.00 ± 0.25 µg/mL	Copper, Cu	25.00 ± 0.11 µg/mL	As	Calculated		See Sec. 4.2
Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	50.00 ± 0.26 µg/mL	As	ICP Assay	3103a	100818
Lithium, Li	100.0 ± 0.7 µg/mL	Magnesium, Mg	5 000 ± 23 µg/mL	Ba	Gravimetric		See Sec. 4.2
Manganese, Mn	50.00 ± 0.23 µg/mL	Nickel, Ni	50.00 ± 0.33 µg/mL	Ba	ICP Assay	3104a	070222
Phosphorus, P	1 000 ± 5 µg/mL	Potassium, K	5 000 ± 22 µg/mL	Be	Calculated		See Sec. 4.2
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	5.000 ± 0.036 µg/mL	Be	ICP Assay	3105a	090514
Sodium, Na	5 000 ± 22 µg/mL	Strontium, Sr	100.0 ± 0.6 µg/mL	Bi	Calculated		See Sec. 4.2
Thallium, Tl	200.0 ± 1.6 µg/mL	Thorium, Th	100.0 ± 0.5 µg/mL	Bi	ICP Assay	3106	991212
Uranium, U	200.0 ± 1.4 µg/mL	Vanadium, V	50.00 ± 0.24 µg/mL	Ca	ICP Assay	3109a	130213
Zinc, Zn	50.00 ± 0.23 µg/mL			Ca	EDTA	928	928
Certified Density:	1.083 g/mL (measured at 20 ± 1 °C)			Cd	ICP Assay	3108	060531
Assay Information:							
				Cd	EDTA	928	928
				Co	ICP Assay	3181	000630
				Co	EDTA	928	928
				Cr3	Calculated		See Sec. 4.2
				Cr3	ICP Assay	3112a	030730
				Cu	ICP Assay	3114	011017
				Cu	EDTA	928	928
				Fe	ICP Assay	3126a	051031
				Fe	EDTA	928	928
				K	Gravimetric		See Sec. 4.2
				K	ICP Assay	3141a	051220
				Li	Gravimetric		See Sec. 4.2
				Li	ICP Assay	3129a	100714
				Mg	ICP Assay	3131a	050302
				Mg	EDTA	928	928
				Mn	ICP Assay	3132	050429
				Mn	EDTA	928	928
				Na	Gravimetric		See Sec. 4.2
				Na	ICP Assay	3152a	120715
				Ni	ICP Assay	3136	000612
				Ni	EDTA	928	928
				P	ICP Assay	3139a	060717
				P	Acidimetric	84L	84L
				Pb	ICP Assay	3128	101026
				Pb	EDTA	928	928
				Se	Calculated		See Sec. 4.2
				Se	ICP Assay	3149	100901
				Sr	ICP Assay	3153a	990906
				Sr	EDTA	928	928
				Th	ICP Assay	3159	992912
				Th	EDTA	928	928
				Tl	ICP Assay	3158	993012
				U	Calculated		See Sec. 4.2
				U	ICP Assay	3164	080521
				V	ICP Assay	3165	992706
				V	EDTA	928	928
				Zn	ICP Assay	3168a	120629
				Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

$[\sum (s_i)^2]^{\frac{1}{2}}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.21 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 26, 2015

11.2 Expiration Date

EXPIRES

1st 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

-00012

Sample Name: ICSA@10 Acquired: 12/31/2014 16:08:51 Type: Unk

Method: 6500_026(v8) Mode: CONC Corr. Factor: 1.000000

User: Scottsa Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem Line Units	Ag3280 328.068 {103}	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	-.00061	RW 525.87	.00909	.00663	.00037	-.00018	-.00452	475.02	.00132	-.00020	.00267	.00409
Stddev	.00022	.05	.00179	.00106	.00006	.00003	.00167	2.39	.00008	.00039	.00019	.00049
%RSD	36.535	.00992	19.660	16.046	17.327	15.963	36.886	.50357	5.7484	191.87	7.1335	11.866
#1	-.00076	525.83	.01036	.00738	.00032	-.00016	-.00334	476.71	.00138	-.00048	.00254	.00443
#2	-.00045	525.91	.00783	.00588	.00041	-.00020	-.00570	473.33	.00127	.00007	.00281	.00375
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 4.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}	Mn2576 257.610 {131}	Mo2020 202.030 {467}	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}
Avg	197.64	-.13273	-.00344	RW 508.19	.00116	-.00264	.02989	.00147	-.01288	.00086	-.18440	.00867
Stddev	.12	.09360	.00241	2.76	.00000	.00002	.00014	.00019	.00191	.00058	.00055	.00260
%RSD	.05887	70.514	70.039	.54312	.36681	.92686	.46012	12.650	14.801	68.217	.30034	29.992
#1	197.72	-.06655	-.00174	506.24	.00115	-.00266	.02979	.00161	-.01423	.00127	-.18401	.01051
#2	197.55	-.19892	-.00514	510.15	.00116	-.00263	.02999	.00134	-.01153	.00044	-.18479	.00683
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Line Units	Se1960 196.090 {472}	Si2881 288.158 {117}	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Ti1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}	
Avg	F -.01024	.03086	-.00358	.00477	-.00712	.00030	.00395	.11075	.00264	.00392	.00293	
Stddev	.01564	.01048	.00034	.00010	.00283	.00033	.00250	.00506	.00062	.00043	.00082	
%RSD	152.74	33.952	9.3550	2.0261	39.795	108.64	63.240	4.5689	23.414	11.075	28.057	
#1	-.02129	.03827	-.00335	.00484	-.00912	.00007	.00572	.11432	.00308	.00423	.00351	
#2	.00082	.02345	-.00382	.00470	-.00511	.00053	.00219	.10717	.00220	.00361	.00235	
Check ? High Limit Low Limit	Chk Fail 50.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}	Cls/S	Cls/S	Cls/S						
Line												
Units												
Avg	3646.6	61943.	4289.4									
Stddev	4.4	68.	7									
%RSD	.12078	.10971	.01543									
#1	3649.7	61991.	4289.9									
#2	3643.5	61895.	4288.9									



300 Technology Drive
Christiansburg, VA 24073 - USA
[inorganicventures.com](mailto:info@inorganicventures.com)

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: CLPP-ICS-A
Lot Number: H2-MEB525068
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 5 000 µg/mL ea:
Al, Ca, Mg,
2 000 µg/mL ea:
Fe

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum	5 001 ± 25 µg/mL	Calcium	5 001 ± 23 µg/mL
Iron	2 000 ± 9 µg/mL	Magnesium	5 001 ± 32 µg/mL

Certified Density: 1.086 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n} \quad (\bar{x}) = \text{mean}$$

x_i = individual results

n = number of measurements

2 = the coverage factor.

$[\sum (s_i)^2]^{\frac{1}{2}}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M	Ag <	0.000401	M	Er <	0.000100	M	Mn	0.003106	O	S	0.466980	M	V <	0.000401
s	Al <		M	Eu <	0.000100	M	Mo <	0.000501	M	Sb <	0.000301	M	W <	0.000301
M	As <	0.004008	s	Fe <		O	Na	0.062011	O	Sc <	0.000543	M	Y <	0.000100
M	Au <	0.000200	M	Ga <	0.000100	M	Nb <	0.000100	M	Se <	0.002505	M	Yb <	0.000100
O	B <	0.012272	M	Gd <	0.000100	M	Nd <	0.000501	O	Si	0.095025	M	Zn	0.017634
O	Ba <	0.001086	O	Ge <	0.032580	O	Ni <	0.005430	M	Sm <	0.000100	M	Zr <	0.000601
O	Be <	0.000217	M	Hf <	0.000100	M	Os <	0.000200	M	Sn <	0.000200			
M	Bi <	0.000301	M	Hg <	0.000400	O	P <	0.108600	M	Sr	0.045788			
s	Ca <		M	Ho <	0.000100	M	Pb	0.004709	M	Ta <	0.000100			
M	Cd <	0.000100	M	In <	0.000401	M	Pd <	0.000100	M	Tb <	0.000100			
M	Ce <	0.002004	M	Ir <	0.000100	M	Pr <	0.000100	M	Te <	0.000100			
O	Co <	0.004344	O	K	0.022806	M	Pt <	0.000100	M	Th <	0.000100			
M	Cr <	0.026251	M	La <	0.001002	M	Rb <	0.000200	O	Ti <	0.002172			
M	Cs <	0.000301	O	Li	0.015313	M	Re <	0.000100	M	Tl <	0.000100			
O	Cu <	0.001086	M	Lu <	0.000100	M	Rh <	0.000100	M	Tm <	0.000100			
M	Dy <	0.000100	s	Mg <		M	Ru <	0.000100	M	U <	0.000100			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 29, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
1st 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 567641.sec - 00010

Lot No.: A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : February 2016

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 60-29-7.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 76-13-1.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
3	1,1-Dichloroethene	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-35-4.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/- 116.2756	µg/mL	Gravimetric
	CAS # 75-65-0.SEC		+/- 442.5291	µg/mL	Unstressed
	Purity 99%		+/- 444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/- 11.6284	µg/mL	Gravimetric
	CAS # 74-88-4.SEC		+/- 44.2540	µg/mL	Unstressed
	Purity 97%		+/- 44.4344	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 107-05-1.SEC		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 79-20-9.SEC		+/- 221.2646	µg/mL	Unstressed
	Purity 99%		+/- 222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-15-0.SEC		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-09-2.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

10	Acrylonitrile CAS # 107-13-1.SEC Purity 99%	20,000.0	µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) CAS # 110-54-3.SEC Purity 98%	2,000.1	µg/mL	+/- 11.6286 +/- 44.2549 +/- 44.4353	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane CAS # 75-34-3.SEC Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane CAS # 594-20-7.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5.SEC Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Chloroform CAS # 67-66-3.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1.SEC Purity 99%	50,000.0	µg/mL	+/- 290.6891 +/- 1,106.3228 +/- 1,110.8331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane CAS # 74-97-5.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran CAS # 109-99-9.SEC Purity 99%	4,000.0	µg/mL	+/- 23.2563 +/- 88.5061 +/- 88.8670	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane CAS # 71-55-6.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane CAS # 110-82-7.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene CAS # 563-58-6.SEC Purity 98%	2,010.5	µg/mL	+/- 11.6890 +/- 44.4847 +/- 44.6661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 98%	2,000.1	µg/mL	+/- 11.6286 +/- 44.2549 +/- 44.4353	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	2,000.1	µg/mL	+/- 11.6288 +/- 44.2553 +/- 44.4357	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethylene CAS # 79-01-6.SEC Purity 98%	2,000.1	µg/mL	+/- 11.6286 +/- 44.2549 +/- 44.4353	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	40,000.0	µg/mL	+/- 232.5513 +/- 885.0582 +/- 888.6665	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Bromodichloromethane CAS # 75-27-4.SEC Purity 97%	2,000.1	µg/mL	+/- 11.6290 +/- 44.2562 +/- 44.4366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Toluene CAS # 108-88-3.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	2,000.1	µg/mL	+/- 11.6290 +/- 44.2562 +/- 44.4366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene CAS # 108-38-3.SEC Purity 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	p-Xylene CAS # 106-42-3.SEC Purity 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

48	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Styrene CAS # 100-42-5.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromoform CAS # 75-25-2.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	2,000.1	µg/mL	+/- 11.6285 +/- 44.2545 +/- 44.4349	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
72	1,2,3-Trichlorobenzene CAS # 87-61-6.SEC Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x .25mm x 1.4um
 Rtx-502.2 (cat.#10916)

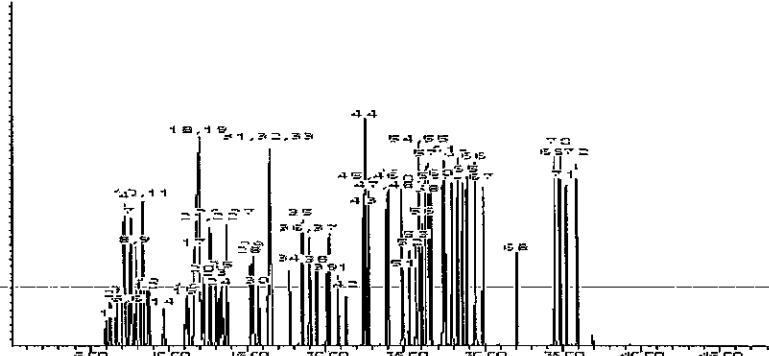
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD





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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 567641 — 00014

Lot No.: A093581

Received 6/2/14

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1000-50,000 µg/mL, P&T Methanol, 1 mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : February 2016

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 60-29-7		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,999.9 µg/mL	+/- 11.6279	µg/mL	Gravimetric
	CAS # 76-13-1		+/- 44.2519	µg/mL	Unstressed
	Purity 97%		+/- 44.4323	µg/mL	Stressed
3	1,1-dichloroethene	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-35-4		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/- 116.2756	µg/mL	Gravimetric
	CAS # 75-65-0		+/- 442.5291	µg/mL	Unstressed
	Purity 99%		+/- 444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 74-88-4		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 107-05-1		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 79-20-9		+/- 221.2646	µg/mL	Unstressed
	Purity 99%		+/- 222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-15-0		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-09-2		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

10	Acrylonitrile CAS # 107-13-1 Purity 99%	20,000.0	µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) CAS # 110-54-3 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane CAS # 75-34-3 Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane CAS # 594-20-7 Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	chloroform CAS # 67-66-3 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 Purity 99%	50,000.0	µg/mL	+/- 290.6891 +/- 1,106.3228 +/- 1,110.8331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane CAS # 74-97-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran CAS # 109-99-9 Purity 99%	4,000.0	µg/mL	+/- 23.2563 +/- 88.5061 +/- 88.8670	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane CAS # 71-55-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane CAS # 110-82-7 Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
24	carbon tetrachloride CAS # 56-23-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethylene CAS # 79-01-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

29	Methylcyclohexane CAS # 108-87-2 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	40,000.0	µg/mL	+/- 232.5513 +/- 885.0582 +/- 888.6665	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	bromodichloromethane CAS # 75-27-4 Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Toluene CAS # 108-88-3 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	Ethyl methacrylate CAS # 97-63-2 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 97%	2,000.0	µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	Tetrachloroethylene CAS # 127-18-4 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	dibromochloromethane CAS # 124-48-1 Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Chlorobenzene CAS # 108-90-7 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene CAS # 108-38-3 Purity 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	p-Xylene CAS # 106-42-3 Purity 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

48	Ethylbenzene CAS # 100-41-4 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Styrene CAS # 100-42-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromoform CAS # 75-25-2 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
56	Bromobenzene CAS # 108-86-1 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed



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Catalog No.: 567642.SEC -00015

Lot No.: A0101295

Description : 8260 List 1 / Std #2 Ketones

8260/624 Ketones Standard 10,000 ug/ml, P&T Methanol/Water (90:10),
1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : February 28, 2017

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone CAS # 67-64-1.SEC Purity 99%	10,015.2 µg/mL (Lot 0902033)	+/-	58.6412 µg/mL	Gravimetric	
			+/-	533.0320 µg/mL	Unstressed	
			+/-	533.6197 µg/mL	Stressed	
2	2-Butanone (MEK) CAS # 78-93-3.SEC Purity 99%	10,010.0 µg/mL (Lot VEGGI)	+/-	58.6108 µg/mL	Gravimetric	
			+/-	532.7553 µg/mL	Unstressed	
			+/-	533.3427 µg/mL	Stressed	
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1.SEC Purity 99%	10,012.4 µg/mL (Lot E29T040)	+/-	58.6248 µg/mL	Gravimetric	
			+/-	532.8830 µg/mL	Unstressed	
			+/-	533.4706 µg/mL	Stressed	
4	2-Hexanone CAS # 591-78-6.SEC Purity 99%	10,016.4 µg/mL (Lot ZSVCD-FF)	+/-	58.6482 µg/mL	Gravimetric	
			+/-	533.0959 µg/mL	Unstressed	
			+/-	533.6837 µg/mL	Stressed	
Solvent:		P&T Methanol/Water (90:10)				
		CAS # 67-56-1/7732-18-5				
		Purity 99%				

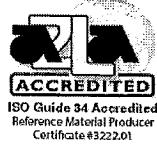


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6x mL
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Gm



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Catalog No.: 567642

Lot No.: A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10),
1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : February 2016

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%



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2x1mL
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Catalog No.: 567643

Lot No.: A093368

Description : 8260 List 1 / Std #4 2-Chloroethylvinyl Ether

8260 List 1 / Std #4 2-Chloroethylvinyl Ether 2,000 ug/ml, P&T Methanol,
1 mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date: February 2016

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether CAS # 110-75-8 Purity 99%	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.



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Catalog No.: 567643

Lot No.: A093368

Description : 8260 List 1 / Std #4 2-Chloroethylvinyl Ether

8260 List 1 / Std #4 2-Chloroethylvinyl Ether 2,000 ug/ml, P&T Methanol,
1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date: February 2016

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether CAS # 110-75-8 Purity 99%	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.



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Catalog No.: 567645.sec — 0001

Lot No.: A099261

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : November 30, 2015

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8-SEC Purity 99%	2,002.2 µg/mL	+/- 16.7616	µg/mL	Gravimetric
	(Lot 18348)		+/- 21.2987	µg/mL	Unstressed
			+/- 24.7536	µg/mL	Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3-SEC Purity 99%	2,000.6 µg/mL	+/- 15.8216	µg/mL	Gravimetric
	(Lot 18343)		+/- 21.2729	µg/mL	Unstressed
			+/- 24.7262	µg/mL	Stressed
3	Vinyl chloride CAS # 75-01-4-SEC Purity 99%	2,001.9 µg/mL	+/- 14.6785	µg/mL	Gravimetric
	(Lot MKBK6872V)		+/- 21.2759	µg/mL	Unstressed
			+/- 24.7329	µg/mL	Stressed
4	1,3-Butadiene CAS # 106-99-0-SEC Purity 99%	2,002.8 µg/mL	+/- 16.7307	µg/mL	Gravimetric
	(Lot 18349)		+/- 21.3051	µg/mL	Unstressed
			+/- 24.7611	µg/mL	Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9-SEC Purity 99%	1,999.6 µg/mL	+/- 16.2313	µg/mL	Gravimetric
	(Lot Q119-46)		+/- 21.2671	µg/mL	Unstressed
			+/- 24.7183	µg/mL	Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3-SEC Purity 99%	2,001.0 µg/mL	+/- 14.6721	µg/mL	Gravimetric
	(Lot Q18B-13)		+/- 21.2666	µg/mL	Unstressed
			+/- 24.7221	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4-SEC Purity 99%	2,004.4 µg/mL	+/- 15.1665	µg/mL	Gravimetric
	(Lot SHBC0858V)		+/- 21.3071	µg/mL	Unstressed
			+/- 24.7678	µg/mL	Stressed
8	Trichlorofluoromethane (CFC-11) CAS # 75-69-4-SEC Purity 99%	2,001.8 µg/mL	+/- 16.2157	µg/mL	Gravimetric
	(Lot Q139-99)		+/- 21.2894	µg/mL	Unstressed
			+/- 24.7442	µg/mL	Stressed



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2x/mL

REC

1/6/15



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Catalog No. : 567645

Lot No.: A0105755

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : September 30, 2016

Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 Purity 99%	1,996.9 µg/mL (Lot Q16A-86)	+/- 16.4920	µg/mL	Gravimetric
			+/- 25.3820	µg/mL	Unstressed
			+/- 28.4359	µg/mL	Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 Purity 99%	2,003.6 µg/mL (Lot SHBC8470V)	+/- 13.5945	µg/mL	Gravimetric
			+/- 23.6556	µg/mL	Unstressed
			+/- 26.9268	µg/mL	Stressed
3	Vinyl chloride CAS # 75-01-4 Purity 99%	2,001.1 µg/mL (Lot 17542)	+/- 27.3546	µg/mL	Gravimetric
			+/- 33.4976	µg/mL	Unstressed
			+/- 35.8765	µg/mL	Stressed
4	1,3-Butadiene CAS # 106-99-0 Purity 99%	1,999.9 µg/mL (Lot SHBD5808V)	+/- 23.4547	µg/mL	Gravimetric
			+/- 30.3891	µg/mL	Unstressed
			+/- 32.9901	µg/mL	Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9 Purity 99%	1,998.7 µg/mL (Lot 101604)	+/- 30.0266	µg/mL	Gravimetric
			+/- 35.7004	µg/mL	Unstressed
			+/- 37.9363	µg/mL	Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3 Purity 99%	2,000.1 µg/mL (Lot SHBD1717V)	+/- 18.0935	µg/mL	Gravimetric
			+/- 26.4730	µg/mL	Unstressed
			+/- 29.4228	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 Purity 99%	1,999.1 µg/mL (Lot Q9B-58)	+/- 17.9677	µg/mL	Gravimetric
			+/- 26.3801	µg/mL	Unstressed
			+/- 29.3364	µg/mL	Stressed
8	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 Purity 99%	2,001.1 µg/mL (Lot SHBD5121V)	+/- 24.2299	µg/mL	Gravimetric
			+/- 30.9989	µg/mL	Unstressed
			+/- 33.5557	µg/mL	Stressed

3x1mL RSC 2/24/15
GM



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Catalog No. : 567648

Lot No.: A0108012

Description : 8260 List 2 / Std #3 Cyclohexanone

8260 List 2 / Std #3 Cyclohexanone 20,000 ug/ml, Water, 1 mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : December 31, 2017

Storage: 10°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Cyclohexanone CAS # 108-94-1 Purity 99%	20,022.0 µg/mL (Lot MKBP7869V)	+/- 117.2332 µg/mL	+/- 1,065.6170 µg/mL	+/- 1,066.7919 µg/mL

Solvent: Water
CAS # 7732-18-5
Purity 99%



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Catalog No.: 567650-00019

Lot No.: A0101000

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 mL/ampul

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : January 31, 2019

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane	2,509.6 µg/mL	+/-	14.5910	µg/mL
	CAS # 1868-53-7		+/-	28.2993	µg/mL
	Purity 99%		+/-	32.5644	µg/mL
2	1,2-Dichloroethane-d4	2,508.2 µg/mL	+/-	14.5829	µg/mL
	CAS # 17060-07-0		+/-	28.2836	µg/mL
	Purity 99%		+/-	32.5462	µg/mL
3	Toluene-d8	2,508.8 µg/mL	+/-	14.5864	µg/mL
	CAS # 2037-26-5		+/-	28.2903	µg/mL
	Purity 99%		+/-	32.5540	µg/mL
4	1-Bromo-4-fluorobenzene (BFB)	2,509.8 µg/mL	+/-	14.5922	µg/mL
	CAS # 460-00-4		+/-	28.3016	µg/mL
	Purity 99%		+/-	32.5670	µg/mL
Solvent:	P&T Methanol				
	CAS # 67-56-1				
	Purity 99%				



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5 x 15 mL
REC 12/29/14



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Catalog No.: 567650

Lot No.: A0105143

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 mL/ampul

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : August 31, 2019

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane CAS # 1868-53-7 Purity 99%	2,512.4 μg/mL	+/- 14.6073	μg/mL	Gravimetric
	(Lot 022013)		+/- 28.3309	μg/mL	Unstressed
			+/- 32.6007	μg/mL	Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 Purity 99%	2,506.0 μg/mL	+/- 14.5701	μg/mL	Gravimetric
	(Lot 14C-191)		+/- 28.2587	μg/mL	Unstressed
			+/- 32.5176	μg/mL	Stressed
3	Toluene-d8 CAS # 2037-26-5 Purity 99%	2,499.8 μg/mL	+/- 14.5341	μg/mL	Gravimetric
	(Lot 14C-176)		+/- 28.1888	μg/mL	Unstressed
			+/- 32.4372	μg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 Purity 99%	2,500.4 μg/mL	+/- 14.5375	μg/mL	Gravimetric
	(Lot 20401KOV)		+/- 28.1956	μg/mL	Unstressed
			+/- 32.4450	μg/mL	Stressed
Solvent: P&T Methanol CAS # 67-56-1 Purity 99%					



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8x1mL
REC 8/1/14



Gravimetric Certificate

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Catalog No.: 568034

Lot No.: A0104827

Description : Denver Main Add Ons Standard

Denver Main Add Ons Standard 1,000-30,000 µg/ml, P&T
Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : January 31, 2016

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Chlorohexane	1,000.0 µg/mL	+/-	10.0737	µg/mL
	CAS # 544-10-5		+/-	53.8499	µg/mL
	Purity 99%		+/-	53.9079	µg/mL
2	2-Butanol (sec-butyl alcohol)	30,020.0 µg/mL	+/-	277.8107	µg/mL
	CAS # 78-92-2		+/-	1,612.1523	µg/mL
	Purity 99%		+/-	1,613.8982	µg/mL
3	2-Pentanone	4,004.0 µg/mL	+/-	37.2350	µg/mL
	CAS # 107-87-9		+/-	215.0566	µg/mL
	Purity 99%		+/-	215.2894	µg/mL

Solvent: P&T Methanol/Water (90:10)

CAS # 67-56-1/7732-18-5

Purity 99%

J. Fallon
F. Joseph Fallon - Mix Technician

Date Mixed: 22-Jul-2014

Balance: B251644995

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397



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Catalog No.: 568036 - 0007

Lot No.: A0104018

Description : Denver Supp Add Ons Standard #2

Denver Supp Add Ons Standard #2 1,000 µg/mL, P&T Methanol, 1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : December 31, 2015

Storage: 0°C or colder

Received
6/18/14

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	cis-1,4-Dichloro-2-butene	1,001.0 µg/mL	+/-	10.0842 µg/mL	Gravimetric
	CAS # 1476-11-5	(Lot SHBD5650V)	+/-	13.9728 µg/mL	Unstressed
	Purity 97%		+/-	15.3799 µg/mL	Stressed
2	Tetrahydrothiophene	1,000.0 µg/mL	+/-	10.0737 µg/mL	Gravimetric
	CAS # 110-01-0	(Lot 08905ED)	+/-	13.9583 µg/mL	Unstressed
	Purity 99%		+/-	15.3639 µg/mL	Stressed
Solvent:	P&T Methanol				
	CAS # 67-56-1				
	Purity 99%				

Kendra Swope - Mix Technician

Date Mixed: 13-Jun-2014 Balance: 1125113331

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 - D - 00002

Lot No.: A099955

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL

Pkg Amt: > 5 mL

Expiration Date : December 31, 2018

Storage: 0°C or colder

received
6/5/14

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 99%	5,022.0 µg/mL (Lot C158P9)	+/- 29.4049	µg/mL	Gravimetric
			+/- 106.5603	µg/mL	Unstressed
			+/- 107.0326	µg/mL	Stressed
2	2-Butanone-d5 CAS # 24313-50-6 Purity 99%	1,251.0 µg/mL (Lot M276P8)	+/- 7.3416	µg/mL	Gravimetric
			+/- 26.5492	µg/mL	Unstressed
			+/- 26.6668	µg/mL	Stressed
3	Fluorobenzene CAS # 462-06-6 Purity 99%	251.5 µg/mL (Lot 1380033)	+/- 1.4938	µg/mL	Gravimetric
			+/- 5.3424	µg/mL	Unstressed
			+/- 5.3660	µg/mL	Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 Purity 99%	5,002.0 µg/mL (Lot 11C-596)	+/- 29.2878	µg/mL	Gravimetric
			+/- 106.1359	µg/mL	Unstressed
			+/- 106.6064	µg/mL	Stressed
5	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99%	251.0 µg/mL (Lot PR-22736)	+/- 1.4909	µg/mL	Gravimetric
			+/- 5.3318	µg/mL	Unstressed
			+/- 5.3554	µg/mL	Stressed
	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99%	251.0 µg/mL (Lot PR-18488)	+/- 1.4909	µg/mL	Gravimetric
			+/- 5.3318	µg/mL	Unstressed
			+/- 5.3554	µg/mL	Stressed

*Rec 3/2/15 Cr
2x1mL*

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 568720 **Lot No.:** A0108734
Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2015 **Storage:** 10°C or colder
Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein CAS # 107-02-8 Purity 99%	19,890.0 µg/mL (Lot 150115JLM)	+/- 116.4603	µg/mL	Gravimetric
			+/- 637.7359	µg/mL	Unstressed
			+/- 741.2982	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%



CERTIFIED REFERENCE MATERIAL

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Tel: (800)356-1688
Fax: (814)353-1309

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2x1mL
REC 6/1/15 GM



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 568720 Lot No.: A0109948
Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : July 31, 2015 Storage: 10°C or colder
Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,756.0 µg/mL	+/- 115.6757	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 150115JLM)	+/- 633.4395	µg/mL	Unstressed
	Purity 99%		+/- 736.3041	µg/mL	Stressed

Solvent: Water
CAS #: 7732-18-5
Purity: 99%



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

4 x 1 mL
REC 2/23/15 GM



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569724

Lot No.: A0108225

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2015

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate CAS # 108-05-4 Purity 99%	5,000.0 μg/mL	+/- 29.3428	μg/mL	Gravimetric

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.



CERTIFIED REFERENCE MATERIAL

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569725

Lot No.: A0108219

Description : 8260 List 2/ Std #1 Additions (2015)

8260 List 2/ Std #1 Additions (2015) 2500-62,500 µg/ml, P&T Methanol,
1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2015

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Propanol (isopropanol) CAS # 67-63-0 Purity 99%	25,013.0 µg/mL (Lot SHBC9345V)	+/- 146.4566 µg/mL	+/- 1,331.2495 µg/mL	Gravimetric Unstressed
			+/- 1,332.7173 µg/mL	+/- 1,332.7173 µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 Purity 99%	2,500.0 µg/mL (Lot 140611JLM)	+/- 33.4403 µg/mL	+/- 136.4105 µg/mL	Gravimetric Unstressed
			+/- 136.5536 µg/mL	+/- 136.5536 µg/mL	Stressed
3	Ethyl acetate CAS # 141-78-6 Purity 99%	5,001.5 µg/mL (Lot SHBF1248V)	+/- 29.2849 µg/mL	+/- 266.1914 µg/mL	Gravimetric Unstressed
			+/- 266.4849 µg/mL	+/- 266.4849 µg/mL	Stressed
4	Methacrylonitrile CAS # 126-98-7 Purity 99%	25,011.0 µg/mL (Lot 1012014)	+/- 146.4449 µg/mL	+/- 1,331.1430 µg/mL	Gravimetric Unstressed
			+/- 1,332.6108 µg/mL	+/- 1,332.6108 µg/mL	Stressed
5	2,2,4-Trimethylpentane (isooctane) CAS # 540-84-1 Purity 99%	2,505.5 µg/mL (Lot SHBB2470V)	+/- 14.7037 µg/mL	+/- 133.3522 µg/mL	Gravimetric Unstressed
			+/- 133.4992 µg/mL	+/- 133.4992 µg/mL	Stressed
6	1-Butanol CAS # 71-36-3 Purity 99%	62,530.5 µg/mL (Lot SHBF1679V)	+/- 366.1109 µg/mL	+/- 3,328.0152 µg/mL	Gravimetric Unstressed
			+/- 3,331.6847 µg/mL	+/- 3,331.6847 µg/mL	Stressed
7	1,4-Difluorobenzene CAS # 540-36-3 Purity 99%	2,514.0 µg/mL (Lot MKBN8571V)	+/- 14.7536 µg/mL	+/- 133.8046 µg/mL	Gravimetric Unstressed
			+/- 133.9521 µg/mL	+/- 133.9521 µg/mL	Stressed

8	Ethyl acrylate CAS # 140-88-5 Purity 99%	(Lot 10129902)	2,508.0	µg/mL	+/-	14.7183	µg/mL	Gravimetric
					+/-	133.4852	µg/mL	Unstressed
					+/-	133.6324	µg/mL	Stressed
9	Methyl methacrylate CAS # 80-62-6 Purity 99%	(Lot STBD4840V)	5,005.5	µg/mL	+/-	29.3083	µg/mL	Gravimetric
					+/-	266.4042	µg/mL	Unstressed
					+/-	266.6980	µg/mL	Stressed
10	2-Nitropropane CAS # 79-46-9 Purity 97%	(Lot BCBJ4343V)	5,008.6	µg/mL	+/-	29.3264	µg/mL	Gravimetric
					+/-	266.5690	µg/mL	Unstressed
					+/-	266.8629	µg/mL	Stressed
11	Butyl acetate CAS # 123-86-4 Purity 99%	(Lot SHBF4442V)	2,503.5	µg/mL	+/-	14.6919	µg/mL	Gravimetric
					+/-	133.2457	µg/mL	Unstressed
					+/-	133.3926	µg/mL	Stressed
12	1-Chlorohexane CAS # 544-10-5 Purity 98%	(Lot 05107LK)	2,503.4	µg/mL	+/-	14.6914	µg/mL	Gravimetric
					+/-	133.2409	µg/mL	Unstressed
					+/-	133.3878	µg/mL	Stressed
13	1,2,3-Trimethylbenzene CAS # 526-73-8 Purity 97%	(Lot 877605-14)	2,506.0	µg/mL	+/-	14.7066	µg/mL	Gravimetric
					+/-	133.3785	µg/mL	Unstressed
					+/-	133.5256	µg/mL	Stressed
14	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBB7346V)	2,501.0	µg/mL	+/-	14.6773	µg/mL	Gravimetric
					+/-	133.1127	µg/mL	Unstressed
					+/-	133.2594	µg/mL	Stressed
15	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	2,504.5	µg/mL	+/-	14.6978	µg/mL	Gravimetric
					+/-	133.2989	µg/mL	Unstressed
					+/-	133.4459	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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4 x mL
REC 2/3/15 CMC



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569728

Lot No.: A0108216

Description : 8260 List 3/ Std#1 Polar Additions (2015)

8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date: January 31, 2017

Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethanol	100,006.7 µg/mL	+/- 585.5308	µg/mL	Gravimetric
	CAS # 64-17-5		+/- 3,484.8988	µg/mL	Unstressed
	Purity 99%		+/- 3,604.3075	µg/mL	Stressed
2	Acetonitrile	25,004.7 µg/mL	+/- 146.4078	µg/mL	Gravimetric
	CAS # 75-05-8		+/- 871.3305	µg/mL	Unstressed
	Purity 99%		+/- 901.1862	µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,501.3 µg/mL	+/- 14.6792	µg/mL	Gravimetric
	CAS # 108-20-3		+/- 87.1689	µg/mL	Unstressed
	Purity 99%		+/- 90.1553	µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,500.7 µg/mL	+/- 14.6753	µg/mL	Gravimetric
	CAS # 637-92-3		+/- 87.1456	µg/mL	Unstressed
	Purity 99%		+/- 90.1313	µg/mL	Stressed
5	Propionitrile	25,001.3 µg/mL	+/- 146.3883	µg/mL	Gravimetric
	CAS # 107-12-0		+/- 871.2144	µg/mL	Unstressed
	Purity 99%		+/- 901.0661	µg/mL	Stressed
6	tert-Amyl alcohol	25,006.0 µg/mL	+/- 146.4156	µg/mL	Gravimetric
	CAS # 75-85-4		+/- 871.3770	µg/mL	Unstressed
	Purity 99%		+/- 901.2343	µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,502.0 µg/mL	+/- 14.6831	µg/mL	Gravimetric
	CAS # 994-05-8		+/- 87.1921	µg/mL	Unstressed
	Purity 99%		+/- 90.1793	µg/mL	Stressed



1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	SB107	Quality Test / Release Date	11/3/2014
Lot Number	147065	Expiration Date	Nov/16
Description	BUFFER SOLUTION, CERTIFIED, PH 7.00		
Country of Origin	United States		
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	CLEAR YELLOW LIQUID
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
NIST STD : pH 9.180	BORAX	= LOT 187E	LOT 187E
NIST STD USED: pH 7a	POT DIHYDRO PHOS	= LOT 186IIG	LOT 186IIG
NIST STD USED: pH 7b	DISOD HYDRO PHOS	= LOT 186IIG	LOT 186IIG
OPTICAL ABSORBANCE	PASS/FAIL	= PASS TEST	PASS TEST
PH AT 25 DEGREES C		Inclusive Between 6.99 - 7.01	7.01
TRACEABLE TO NIST	PASS/FAIL	= PASS TEST	PASS TEST



Lab Manager Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
 *Based on suggested storage condition.



300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

- 1.0** INORGANIC VENTURES is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."



- 2.0** **DESCRIPTION OF CRM** Custom Solution
Catalog No.: STL-TCLP-2
Lot Number: G2-MEB477032
Matrix: 3% HNO₃(v/v)



2679675

ID: TCLP Spike_00011
Exp:06/01/15 Prpd:WAW Open:05/21/14
TCLP spike

1,000 µg/mL ea:
Ba,
500 µg/mL ea:
Cr₃, Pb,
300 µg/mL ea:
As,
200 µg/mL ea:
Cu, Zn,
100 µg/mL ea:
Ag, Cd, Se

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Arsenic, As	300.0 ± 2.0 µg/mL	Barium, Ba	1,000 ± 7 µg/mL	Cadmium, Cd	100.0 ± 0.6 µg/mL
Chromium+3, Cr ₃	500.0 ± 3.2 µg/mL	Copper, Cu	200.0 ± 1.3 µg/mL	Lead, Pb	500.1 ± 3.3 µg/mL
Selenium, Se	100.0 ± 0.7 µg/mL	Silver, Ag	100.1 ± 0.6 µg/mL	Zinc, Zn	200.0 ± 1.3 µg/mL

Certified Density: 1.022 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where s stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

- "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
- This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	992106
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN $\mu\text{g/mL}$ - N/A

6.0 INTENDED USE

- For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
- For the validation of analytical methods
- For the preparation of "working reference samples"
- For interference studies and the determination of correction coefficients
- For detection limit and linearity studies
- For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep Tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do Not pipette from the container. Do Not return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: May 17, 2013

Expiration Date: EXPRIES
1/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By: Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R. Gaines

Certification Summary

Client: GSI Environmental, Inc

Project/Site: GSI - McConnell Air Force Base, Kansas

TestAmerica Job ID: 280-69513-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alaska (UST)	State Program	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas DEQ	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAP	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Illinois	NELAP	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAP	7	E-10166
TestAmerica Denver	Louisiana	NELAP	6	02096
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Minnesota	NELAP	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAP	1	205310
TestAmerica Denver	New Jersey	NELAP	2	CO004
TestAmerica Denver	New York	NELAP	2	11964
TestAmerica Denver	North Carolina (WW/SW)	State Program	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAP	10	4025
TestAmerica Denver	Pennsylvania	NELAP	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002001
TestAmerica Denver	Texas	NELAP	6	T104704183-13-8
TestAmerica Denver	USDA	Federal		P330-13-00202
TestAmerica Denver	Utah	NELAP	8	CO00026
TestAmerica Denver	Virginia	NELAP	3	460232
TestAmerica Denver	Washington	State Program	10	C583
TestAmerica Denver	West Virginia DEP	State Program	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430
TestAmerica Denver	Wyoming (UST)	A2LA	8	2907.01

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8260B

Volatile Organic Compounds (GC/MS)
by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Matrix: Solid (TCLP) Level: Low
GC Column (1): DB-624 (60. ID: 0.25 (mm))

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
54400-IDW01-0515	280-69513-5	114	115	109	101
54400-IDW02-0515	280-69513-6	108	108	110	100
	LB 280-278801/1-A	107	108	105	95
	LCS 280-278801/2-A	107	104	105	94

DBFM = Dibromofluoromethane (Surrogate)
DCA = 1,2-Dichloroethane-d4 (Surrogate)
TOL = Toluene-d8 (Surrogate)
BFB = 4-Bromofluorobenzene (Surrogate)

QC LIMITS

79-119
64-129
78-120
78-121

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Matrix: Water Level: Low
GC Column (1): DB-624 (75. ID: 0.53 (mm))

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
54403-TB17-0515	280-69513-1	100	95	96	101
54400-MW53D-0515	280-69513-2	98	91	99	100
54400-MW53S-0515	280-69513-3	98	95	98	100
54402-EB17-0515	280-69513-4	99	93	98	100
	MB 280-279458/6	98	95	100	101
	LCS 280-279458/4	96	97	104	102

DBFM = Dibromofluoromethane (Surrogate)
DCA = 1,2-Dichloroethane-d4 (Surrogate)
TOL = Toluene-d8 (Surrogate)
BFB = 4-Bromofluorobenzene (Surrogate)

QC LIMITS
80-119
81-118
89-112
85-114

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: H3001.D
Lab ID: LCS 280-279458/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.08	102	78-124	
1,1,1-Trichloroethane	5.00	4.84	97	74-131	
1,1,2,2-Tetrachloroethane	5.00	4.78	96	71-121	
1,1,2-Trichloroethane	5.00	4.98	100	80-119	
1,1-Dichloroethane	5.00	4.83	97	77-125	
1,1-Dichloroethene	5.00	4.75	95	71-131	
1,1-Dichloropropene	5.00	4.98	100	79-125	
1,2,3-Trichlorobenzene	5.00	5.19	104	69-129	
1,2,3-Trichloropropane	5.00	4.77	95	73-122	
1,2,4-Trichlorobenzene	5.00	5.11	102	69-130	
1,2,4-Trimethylbenzene	5.00	4.72	94	76-124	
1,2-Dibromo-3-Chloropropane	5.00	5.13	103	62-128	
1,2-Dibromoethane	5.00	5.07	101	77-121	
1,2-Dichlorobenzene	5.00	5.01	100	80-119	
1,2-Dichloroethane	5.00	4.89	98	73-128	
1,2-Dichloropropane	5.00	4.80	96	78-122	
1,3,5-Trimethylbenzene	5.00	4.81	96	75-124	
1,3-Dichlorobenzene	5.00	4.58	92	80-119	
1,3-Dichloropropane	5.00	4.84	97	80-119	
1,4-Dichlorobenzene	5.00	5.17	103	79-118	
2,2-Dichloropropane	5.00	4.78	96	60-139	
2-Butanone (MEK)	20.0	21.0	105	56-143	
2-Chlorotoluene	5.00	4.74	95	79-122	
2-Hexanone	20.0	20.9	105	57-139	
4-Chlorotoluene	5.00	4.93	99	78-122	
4-Methyl-2-pentanone (MIBK)	20.0	21.6	108	67-130	
Acetone	20.0	18.1	90	39-160	
Benzene	5.00	5.00	100	79-120	
Bromobenzene	5.00	4.86	97	80-120	
Bromochloromethane	5.00	4.96	99	78-123	
Bromodichloromethane	5.00	4.89	98	79-125	
Bromoform	5.00	5.18	104	66-130	
Bromomethane	5.00	5.40	108	53-141	
Carbon disulfide	5.00	4.62	92	64-133	
Carbon tetrachloride	5.00	4.83	97	72-136	
Chlorobenzene	5.00	5.02	100	82-118	
Chlorodibromomethane	5.00	5.15	103	74-126	
Chloroethane	5.00	5.36	107	60-138	
Chloroform	5.00	4.88	98	79-124	
Chloromethane	5.00	5.32	106	50-139	
cis-1,2-Dichloroethene	5.00	4.80	96	78-123	
cis-1,3-Dichloropropene	5.00	5.19	104	75-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: H3001.D
Lab ID: LCS 280-279458/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromomethane	5.00	4.73	95	79-123	
Dichlorodifluoromethane	5.00	5.86	117	32-152	
Ethylbenzene	5.00	4.91	98	79-121	
Hexachlorobutadiene	5.00	4.97	99	66-134	
Isopropylbenzene	5.00	4.83	97	72-131	
Methyl tert-butyl ether	5.00	5.03	101	71-124	
Methylene Chloride	5.00	5.93	119	74-124	
m-Xylene & p-Xylene	5.00	5.11	102	80-121	
Naphthalene	5.00	5.09	102	61-128	
n-Butylbenzene	5.00	4.76	95	75-128	
N-Propylbenzene	5.00	4.79	96	76-126	
o-Xylene	5.00	4.95	99	78-122	
p-Isopropyltoluene	5.00	4.92	98	77-127	
sec-Butylbenzene	5.00	4.73	95	77-126	
Styrene	5.00	4.91	98	78-123	
tert-Butyl alcohol	50.0	54.5	109	68-129	
tert-Butylbenzene	5.00	4.75	95	78-124	
Tetrachloroethene	5.00	5.00	100	74-129	
Toluene	5.00	4.90	98	80-121	
trans-1,2-Dichloroethene	5.00	4.84	97	75-124	
trans-1,3-Dichloropropene	5.00	5.20	104	73-127	
Trichloroethene	5.00	5.05	101	79-123	
Trichlorofluoromethane	5.00	5.50	110	65-141	
Vinyl chloride	5.00	5.41	108	58-137	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Matrix: Solid (TCLP) Level: Low Lab File ID: P4812.D

Lab ID: LCS 280-278801/2-A Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	0.00500	0.00465	93	71-136	
1,2-Dichloroethane	0.00500	0.00482	96	70-135	
2-Butanone (MEK)	0.0200	0.0182	91	44-150	
Benzene	0.00500	0.00480	96	74-135	
Carbon tetrachloride	0.00500	0.00518	104	67-135	
Chlorobenzene	0.00500	0.00466	93	76-135	
Chloroform	0.00500	0.00491	98	76-120	
Tetrachloroethene	0.00500	0.00480	96	70-135	
Trichloroethene	0.00500	0.00468	94	73-135	
Vinyl chloride	0.00500	0.00476	95	40-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab File ID: H3003.D Lab Sample ID: MB 280-279458/6
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: VMS_H Date Analyzed: 05/28/2015 21:10
GC Column: DB-624 (75.53) ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-279458/4	H3001.D	05/28/2015 20:25
54403-TB17-0515	280-69513-1	H3011.D	05/29/2015 00:11
54400-MW53D-0515	280-69513-2	H3012.D	05/29/2015 00:34
54400-MW53S-0515	280-69513-3	H3013.D	05/29/2015 00:56
54402-EB17-0515	280-69513-4	H3014.D	05/29/2015 01:19

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab File ID: H2946.D BFB Injection Date: 05/27/2015

Instrument ID: VMS_H BFB Injection Time: 23:12

Analysis Batch No.: 279265

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.4
75	30.0 - 60.0 % of mass 95	47.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	61.4
175	5.0 - 9.0 % of mass 174	4.3 (7.0)1
176	95.0 - 101.0 % of mass 174	59.7 (97.2)1
177	5.0 - 9.0 % of mass 176	4.5 (7.5)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-279265/9	H2949.D	05/28/2015	00:18
	IC 280-279265/10	H2950.D	05/28/2015	00:40
	IC 280-279265/11	H2951.D	05/28/2015	01:03
	IC 280-279265/12	H2952.D	05/28/2015	01:25
	IC 280-279265/13	H2953.D	05/28/2015	01:48
	IC 280-279265/14	H2954.D	05/28/2015	02:10
	IC 280-279265/15	H2955.D	05/28/2015	02:33
	ICV 280-279265/22	H2956.D	05/28/2015	02:55
	IC 280-279265/16	H2957.D	05/28/2015	03:18
	IC 280-279265/17	H2958.D	05/28/2015	03:40
	IC 280-279265/18	H2959.D	05/28/2015	04:03
	ICIS 280-279265/19	H2960.D	05/28/2015	04:25
	IC 280-279265/20	H2961.D	05/28/2015	04:48
	IC 280-279265/21	H2962.D	05/28/2015	05:10
	ICV 280-279265/23	H2963.D	05/28/2015	05:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab File ID: H2997.D BFB Injection Date: 05/28/2015

Instrument ID: VMS_H BFB Injection Time: 18:54

Analysis Batch No.: 279458

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.9
75	30.0 - 60.0 % of mass 95	49.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.3
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	61.1
175	5.0 - 9.0 % of mass 174	4.5 (7.4)1
176	95.0 - 101.0 % of mass 174	59.6 (97.5)1
177	5.0 - 9.0 % of mass 176	3.8 (6.3)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-279458/2	H2998.D	05/28/2015	19:17
	CCV 280-279458/3	H2999.D	05/28/2015	19:39
	LCS 280-279458/4	H3001.D	05/28/2015	20:25
	MB 280-279458/6	H3003.D	05/28/2015	21:10
54403-TB17-0515	280-69513-1	H3011.D	05/29/2015	00:11
54400-MW53D-0515	280-69513-2	H3012.D	05/29/2015	00:34
54400-MW53S-0515	280-69513-3	H3013.D	05/29/2015	00:56
54402-EB17-0515	280-69513-4	H3014.D	05/29/2015	01:19
	CCVC 280-279458/33	H3027.D	05/29/2015	06:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Lab File ID: P4170.D BFB Injection Date: 05/16/2015

Instrument ID: VMS_P BFB Injection Time: 10:50

Analysis Batch No.: 277770

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.5
75	30.0 - 60.0 % of mass 95	50.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.0
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	77.6
175	5.0 - 9.0 % of mass 174	5.9 (7.6)1
176	95.0 - 101.0 % of mass 174	76.2 (98.1)1
177	5.0 - 9.0 % of mass 176	5.0 (6.5)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-277770/17	P4181.D	05/16/2015	14:32
	IC 280-277770/18	P4182.D	05/16/2015	14:51
	IC 280-277770/19	P4183.D	05/16/2015	15:11
	ICIS 280-277770/20	P4184.D	05/16/2015	15:30
	IC 280-277770/21	P4185.D	05/16/2015	15:50
	IC 280-277770/22	P4186.D	05/16/2015	16:09
	ICV 280-277770/23	P4188.D	05/16/2015	16:48

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab File ID: P4779.D BFB Injection Date: 06/02/2015

Instrument ID: VMS_P BFB Injection Time: 11:21

Analysis Batch No.: 279915

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.9
75	30.0 - 60.0 % of mass 95	50.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.5
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	74.6
175	5.0 - 9.0 % of mass 174	5.0 (6.7)1
176	95.0 - 101.0 % of mass 174	72.5 (97.1)1
177	5.0 - 9.0 % of mass 176	5.3 (7.3)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD003 280-279915/12	P4781.D	06/02/2015	12:15
	STD010 280-279915/13	P4782.D	06/02/2015	12:35
	STD020 280-279915/14	P4783.D	06/02/2015	12:55
	STD050 280-279915/15	P4784.D	06/02/2015	13:14
	STD10 280-279915/16	P4785.D	06/02/2015	13:34
	STD30 280-279915/17	P4786.D	06/02/2015	13:54
	STD60 280-279915/18	P4787.D	06/02/2015	14:13
	ICV 280-279915/19	P4788.D	06/02/2015	14:33
	ICV 280-279915/20	P4789.D	06/02/2015	15:21

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab File ID: P4809.D BFB Injection Date: 06/02/2015

Instrument ID: VMS_P BFB Injection Time: 22:24

Analysis Batch No.: 280068

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.6
75	30.0 - 60.0 % of mass 95	53.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.4
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	78.6
175	5.0 - 9.0 % of mass 174	5.8 (7.4)1
176	95.0 - 101.0 % of mass 174	74.9 (95.3)1
177	5.0 - 9.0 % of mass 176	4.8 (6.3)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-280068/2	P4810.D	06/02/2015	22:41
	CCV 280-280068/3	P4811.D	06/02/2015	23:01
	LCS 280-278801/2-A	P4812.D	06/02/2015	23:22
	LB 280-278801/1-A	P4813.D	06/02/2015	23:41
54400-IDW01-0515	280-69513-5	P4816.D	06/03/2015	00:40
54400-IDW02-0515	280-69513-6	P4822.D	06/03/2015	02:37
	CCVC 280-280068/22	P4823.D	06/03/2015	02:57

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Sample No.: ICIS 280-279265/19

Date Analyzed: 05/28/2015 04:25

Instrument ID: VMS_H

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Lab File ID (Standard): H2960.D

Heated Purge: (Y/N) N

Calibration ID: 22417

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	211144	3.97	1108417	6.76	256513	11.09	
UPPER LIMIT	422288	4.47	2216834	7.26	513026	11.59	
LOWER LIMIT	105572	3.47	554209	6.26	128257	10.59	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-279265/23		204860	3.97	1164628	6.76	280885	11.11
CCV 280-279458/2		246709	3.99	1179657	6.77	262602	11.11
CCV 280-279458/3		231604	3.98	1204670	6.76	279293	11.11
LCS 280-279458/4		208047	3.99	1178561	6.76	258327	11.11
MB 280-279458/6		212852	3.99	1139866	6.76	259345	11.11
280-69513-1	54403-TB17-0515	223912	3.99	1179289	6.76	281628	11.09
280-69513-2	54400-MW53D-0515	209111	3.99	1180282	6.76	274535	11.11
280-69513-3	54400-MW53S-0515	212439	3.98	1199399	6.76	282192	11.10
280-69513-4	54402-EB17-0515	222679	3.97	1181922	6.76	274528	11.11
CCVC 280-279458/33		198740	3.97	1165022	6.76	253431	11.09

TBA = TBA-d9 (IS)

FB = Fluorobenzene

CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Sample No.: ICIS 280-279265/19 Date Analyzed: 05/28/2015 04:25

Instrument ID: VMS_H GC Column: DB-624 (75.53) ID: 0.53 (mm)

Lab File ID (Standard): H2960.D Heated Purge: (Y/N) N

Calibration ID: 22417

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
INITIAL CALIBRATION MID-POINT	390191	14.11						
UPPER LIMIT	780382	14.61						
LOWER LIMIT	195096	13.61						
LAB SAMPLE ID	CLIENT SAMPLE ID							
ICV 280-279265/23		430424	14.12					
CCV 280-279458/2		442655	14.12					
CCV 280-279458/3		433114	14.13					
LCS 280-279458/4		436380	14.12					
MB 280-279458/6		410461	14.13					
280-69513-1	54403-TB17-0515	429968	14.11					
280-69513-2	54400-MW53D-0515	411161	14.12					
280-69513-3	54400-MW53S-0515	422000	14.11					
280-69513-4	54402-EB17-0515	423292	14.12					
CCVC 280-279458/33		425494	14.10					

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Sample No.: ICIS 280-277770/20 Date Analyzed: 05/16/2015 15:30

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25 (mm)

Lab File ID (Standard): P4184.D Heated Purge: (Y/N) N

Calibration ID: 22332

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	178300	5.79	1700209	7.77	353996	10.02	
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-277770/23		176601	5.79	1728667	7.77	366688	10.03
ICV 280-279915/19		302987	5.79	2191274	7.77	513420	10.03
ICV 280-279915/20		234564	5.80	1898182	7.77	435743	10.03
CCV 280-280068/2		169417	5.79	1394296	7.77	316055	10.03
CCV 280-280068/3		166085	5.80	1452394	7.77	326391	10.03
LCS 280-278801/2-A		169277	5.79	1485796	7.77	343462	10.03
LB 280-278801/1-A		168117	5.79	1437413	7.77	330351	10.03
280-69513-5	54400-IDW01-0515	155891	5.79	1383810	7.77	322488	10.02
280-69513-6	54400-IDW02-0515	160064	5.79	1493147	7.77	335782	10.02
CCVC 280-280068/22		156570	5.79	1437929	7.77	329807	10.02

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Sample No.: ICIS 280-277770/20 Date Analyzed: 05/16/2015 15:30

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25 (mm)

Lab File ID (Standard): P4184.D Heated Purge: (Y/N) N

Calibration ID: 22332

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
INITIAL CALIBRATION MID-POINT	489272	11.87						
UPPER LIMIT								
LOWER LIMIT								
LAB SAMPLE ID	CLIENT SAMPLE ID							
ICV 280-277770/23		498468	11.87					
ICV 280-279915/19		762174	11.87					
ICV 280-279915/20		635769	11.88					
CCV 280-280068/2		511551	11.87					
CCV 280-280068/3		465257	11.87					
LCS 280-278801/2-A		533585	11.87					
LB 280-278801/1-A		471457	11.87					
280-69513-5	54400-IDW01-0515	450541	11.87					
280-69513-6	54400-IDW02-0515	471323	11.87					
CCVC 280-280068/22		526283	11.87					

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54403-TB17-0515

Lab Sample ID: 280-69513-1

Matrix: Water

Lab File ID: H3011.D

Analysis Method: 8260B

Date Collected: 05/19/2015 00:00

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 00:11

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54403-TB17-0515

Lab Sample ID: 280-69513-1

Matrix: Water

Lab File ID: H3011.D

Analysis Method: 8260B

Date Collected: 05/19/2015 00:00

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 00:11

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.:
Client Sample ID: 54403-TB17-0515 Lab Sample ID: 280-69513-1
Matrix: Water Lab File ID: H3011.D
Analysis Method: 8260B Date Collected: 05/19/2015 00:00
Sample wt/vol: 20 (mL) Date Analyzed: 05/29/2015 00:11
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: DB-624 (75.53) ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 279458 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	96		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3011.D
 Lims ID: 280-69513-A-1 Lab Sample ID: 280-69513-1
 Client ID: 54403-TB17-0515
 Sample Type: Client
 Inject. Date: 29-May-2015 00:11:30 ALS Bottle#: 14 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: 280-69513-A-1 pH<2
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:50:09 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:50:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.990	3.970	0.020	99	223912	250.0	
* 2 Fluorobenzene	96	6.758	6.755	0.003	97	1179289	12.5	
* 3 1,4-Dioxane-d8	96		8.670				ND	
* 4 Chlorobenzene-d5	119	11.093	11.090	0.003	92	281628	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.105	14.102	0.003	98	429968	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.922	5.920	0.002	93	505711	8.49	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.340	6.337	0.003	83	267437	8.11	
\$ 10 Toluene-d8 (Surr)	98	8.865	8.862	0.003	95	1122229	8.17	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.747	12.744	0.003	80	630617	8.57	
28 Dichlorodifluoromethane	85		2.159				ND	
30 Chloromethane	50		2.246				ND	
32 Vinyl chloride	62		2.385				ND	
35 Bromomethane	94		2.681				ND	
36 Chloroethane	64		2.751				ND	
38 Trichlorofluoromethane	101		2.977				ND	
45 1,1-Dichloroethene	96		3.465				ND	
47 Acetone	43		3.500				ND	
50 Carbon disulfide	76		3.709				ND	
54 Methylene Chloride	84		3.935				ND	
55 2-Methyl-2-propanol	59		4.057				ND	
58 trans-1,2-Dichloroethene	96		4.231				ND	
56 Methyl tert-butyl ether	73		4.231				ND	
60 1,1-Dichloroethane	63		4.684				ND	
67 2-Butanone (MEK)	43		5.345				ND	
66 2,2-Dichloropropane	77		5.363				ND	
65 cis-1,2-Dichloroethene	96		5.363				ND	
73 Chlorobromomethane	128		5.641				ND	
75 Chloroform	83		5.711				ND	
76 1,1,1-Trichloroethane	97		5.972				ND	
78 1,1-Dichloropropene	75		6.146				ND	
79 Carbon tetrachloride	117		6.181				ND	
81 Benzene	78		6.407				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
82 1,2-Dichloroethane	62	6.425					ND	
86 Trichloroethene	95	7.225					ND	
90 1,2-Dichloropropane	63	7.521					ND	
92 Dibromomethane	93	7.678					ND	
94 Dichlorobromomethane	83	7.887					ND	
97 cis-1,3-Dichloropropene	75	8.479					ND	
98 4-Methyl-2-pentanone (MIBK)	43	8.705					ND	
99 Toluene	91	8.966					ND	
100 trans-1,3-Dichloropropene	75	9.280					ND	
102 1,1,2-Trichloroethane	97	9.541					ND	
103 Tetrachloroethene	164	9.750					ND	
104 1,3-Dichloropropane	76	9.785					ND	
105 2-Hexanone	43	9.906					ND	
108 Chlorodibromomethane	129	10.133					ND	
109 Ethylene Dibromide	107	10.324					ND	
111 Chlorobenzene	112	11.143					ND	
112 1,1,2-Tetrachloroethane	131	11.282					ND	
113 Ethylbenzene	106	11.317					ND	
114 m-Xylene & p-Xylene	106	11.491					ND	
115 o-Xylene	106	12.065					ND	
116 Styrene	104	12.083					ND	
117 Bromoform	173	12.344					ND	
118 Isopropylbenzene	105	12.553					ND	
122 Bromobenzene	156	12.936					ND	
121 1,1,2,2-Tetrachloroethane	83	12.936					ND	
123 1,2,3-Trichloropropane	110	12.988					ND	
125 N-Propylbenzene	120	13.075					ND	
126 2-Chlorotoluene	126	13.179					ND	
127 1,3,5-Trimethylbenzene	105	13.284					ND	
128 4-Chlorotoluene	126	13.301					ND	
129 tert-Butylbenzene	119	13.667					ND	
130 1,2,4-Trimethylbenzene	105	13.719					ND	
131 sec-Butylbenzene	134	13.911					ND	
132 1,3-Dichlorobenzene	146	14.032					ND	
133 4-Isopropyltoluene	119	14.067					ND	
134 1,4-Dichlorobenzene	146	14.137					ND	
137 n-Butylbenzene	91	14.503					ND	
138 1,2-Dichlorobenzene	146	14.520					ND	
139 1,2-Dibromo-3-Chloropropan	157	15.303					ND	
144 1,2,3-Trichlorobenzene	180	16.069					ND	
142 Hexachlorobutadiene	225	16.226					ND	
143 Naphthalene	128	16.296					ND	
141 1,2,4-Trichlorobenzene	180	16.522					ND	

Reagents:

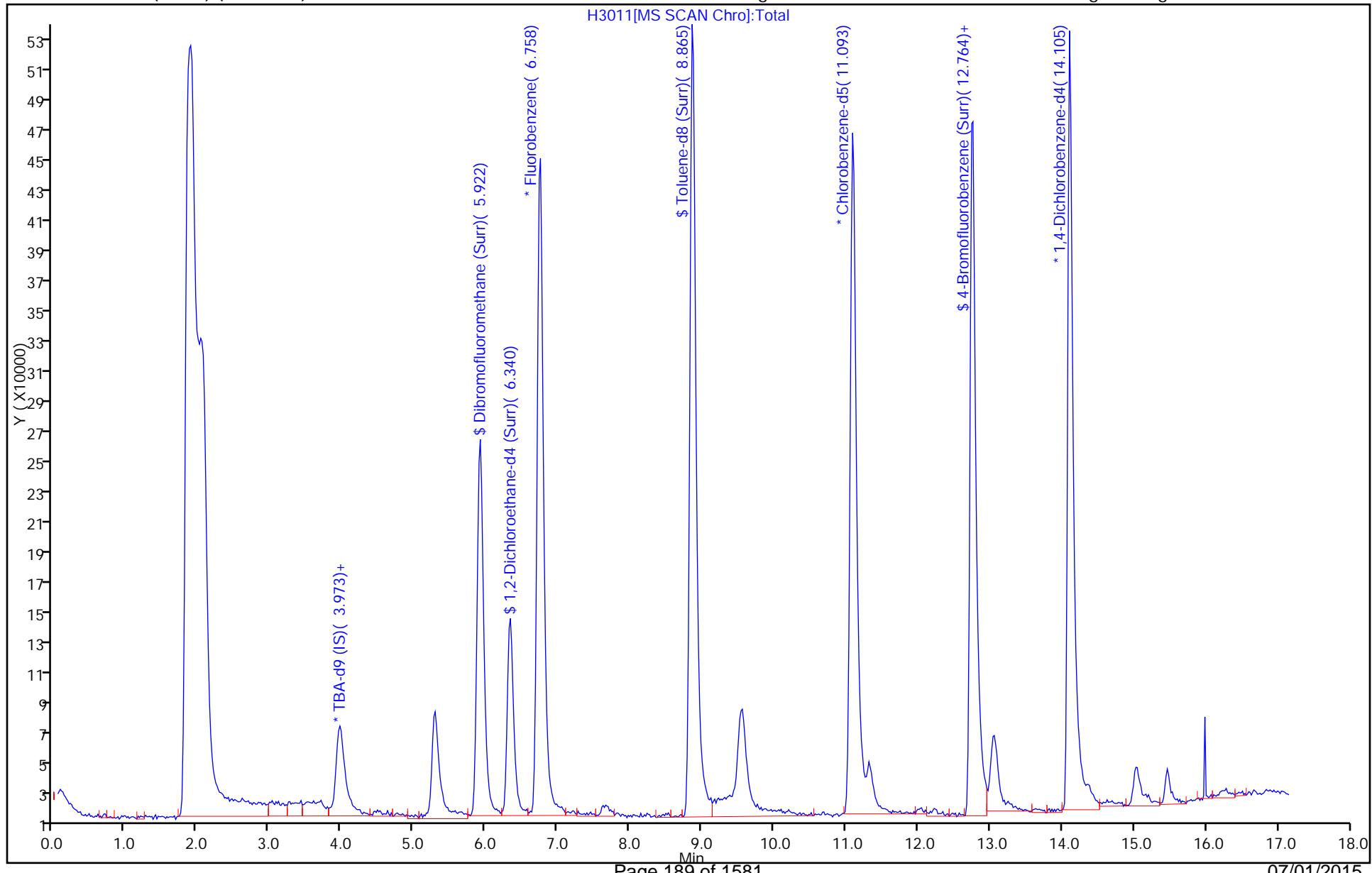
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:50:47

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3011.D
Injection Date: 29-May-2015 00:11:30 Instrument ID: VMS_H Operator ID: bergerb
Lims ID: 280-69513-A-1 Lab Sample ID: 280-69513-1 Worklist Smp#: 17
Client ID: 54403-TB17-0515
Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 14
Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54400-MW53D-0515

Lab Sample ID: 280-69513-2

Matrix: Water

Lab File ID: H3012.D

Analysis Method: 8260B

Date Collected: 05/19/2015 08:55

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 00:34

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	3.0		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	1.4	J	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54400-MW53D-0515

Lab Sample ID: 280-69513-2

Matrix: Water

Lab File ID: H3012.D

Analysis Method: 8260B

Date Collected: 05/19/2015 08:55

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 00:34

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.25	J	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	1.6		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.:
Client Sample ID: 54400-MW53D-0515 Lab Sample ID: 280-69513-2
Matrix: Water Lab File ID: H3012.D
Analysis Method: 8260B Date Collected: 05/19/2015 08:55
Sample wt/vol: 20 (mL) Date Analyzed: 05/29/2015 00:34
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: DB-624 (75.53) ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 279458 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	100		85-114
1868-53-7	Dibromofluoromethane (Surr)	98		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3012.D
 Lims ID: 280-69513-A-2 Lab Sample ID: 280-69513-2
 Client ID: 54400-MW53D-0515
 Sample Type: Client
 Inject. Date: 29-May-2015 00:34:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: 280-69513-A-2 pH<2
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:50:09 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:50:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.987	3.970	0.017	99	209111	250.0	
* 2 Fluorobenzene	96	6.755	6.755	0.000	97	1180282	12.5	
* 3 1,4-Dioxane-d8	96		8.670				ND	
* 4 Chlorobenzene-d5	119	11.108	11.090	0.018	92	274535	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.119	14.102	0.017	98	411161	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.919	5.920	-0.001	93	496500	8.33	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.337	6.337	0.000	83	256267	7.76	
\$ 10 Toluene-d8 (Surr)	98	8.879	8.862	0.017	95	1122674	8.38	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.761	12.744	0.017	80	598364	8.50	
28 Dichlorodifluoromethane	85		2.159				ND	
30 Chloromethane	50		2.246				ND	
32 Vinyl chloride	62		2.385				ND	
35 Bromomethane	94		2.681				ND	
36 Chloroethane	64		2.751				ND	
38 Trichlorofluoromethane	101		2.977				ND	
45 1,1-Dichloroethene	96	3.465	3.465	0.000	94	106172	3.01	
47 Acetone	43		3.500				ND	
50 Carbon disulfide	76		3.709				ND	
54 Methylene Chloride	84		3.935				ND	
55 2-Methyl-2-propanol	59		4.057				ND	
58 trans-1,2-Dichloroethene	96		4.231				ND	
56 Methyl tert-butyl ether	73		4.231				ND	
60 1,1-Dichloroethane	63		4.684				ND	
67 2-Butanone (MEK)	43		5.345				ND	
66 2,2-Dichloropropane	77		5.363				ND	
65 cis-1,2-Dichloroethene	96		5.363				ND	
73 Chlorobromomethane	128		5.641				ND	
75 Chloroform	83	5.711	5.711	0.000	97	19687	0.2518	
76 1,1,1-Trichloroethane	97		5.972				ND	
78 1,1-Dichloropropene	75		6.146				ND	
79 Carbon tetrachloride	117	6.163	6.181	-0.018	98	98410	1.42	
81 Benzene	78		6.407				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
82 1,2-Dichloroethane	62		6.425				ND	
86 Trichloroethene	95	7.225	7.225	0.000	96	82683	1.64	
90 1,2-Dichloropropane	63		7.521				ND	
92 Dibromomethane	93		7.678				ND	
94 Dichlorobromomethane	83		7.887				ND	
97 cis-1,3-Dichloropropene	75		8.479				ND	
98 4-Methyl-2-pentanone (MIBK)	43		8.705				ND	
99 Toluene	91		8.966				ND	
100 trans-1,3-Dichloropropene	75		9.280				ND	
102 1,1,2-Trichloroethane	97		9.541				ND	
103 Tetrachloroethene	164		9.750				ND	
104 1,3-Dichloropropane	76		9.785				ND	
105 2-Hexanone	43		9.906				ND	
108 Chlorodibromomethane	129		10.133				ND	
109 Ethylene Dibromide	107		10.324				ND	
111 Chlorobenzene	112		11.143				ND	
112 1,1,2-Tetrachloroethane	131		11.282				ND	
113 Ethylbenzene	106		11.317				ND	
114 m-Xylene & p-Xylene	106		11.491				ND	
115 o-Xylene	106		12.065				ND	
116 Styrene	104		12.083				ND	
117 Bromoform	173		12.344				ND	
118 Isopropylbenzene	105		12.553				ND	
122 Bromobenzene	156		12.936				ND	
121 1,1,2,2-Tetrachloroethane	83		12.936				ND	
123 1,2,3-Trichloropropane	110		12.988				ND	
125 N-Propylbenzene	120		13.075				ND	
126 2-Chlorotoluene	126		13.179				ND	
127 1,3,5-Trimethylbenzene	105		13.284				ND	
128 4-Chlorotoluene	126		13.301				ND	
129 tert-Butylbenzene	119		13.667				ND	
130 1,2,4-Trimethylbenzene	105		13.719				ND	
131 sec-Butylbenzene	134		13.911				ND	
132 1,3-Dichlorobenzene	146		14.032				ND	
133 4-Isopropyltoluene	119		14.067				ND	
134 1,4-Dichlorobenzene	146		14.137				ND	
137 n-Butylbenzene	91		14.503				ND	
138 1,2-Dichlorobenzene	146		14.520				ND	
139 1,2-Dibromo-3-Chloropropan	157		15.303				ND	
144 1,2,3-Trichlorobenzene	180		16.069				ND	
142 Hexachlorobutadiene	225		16.226				ND	
143 Naphthalene	128		16.296				ND	
141 1,2,4-Trichlorobenzene	180		16.522				ND	

Reagents:

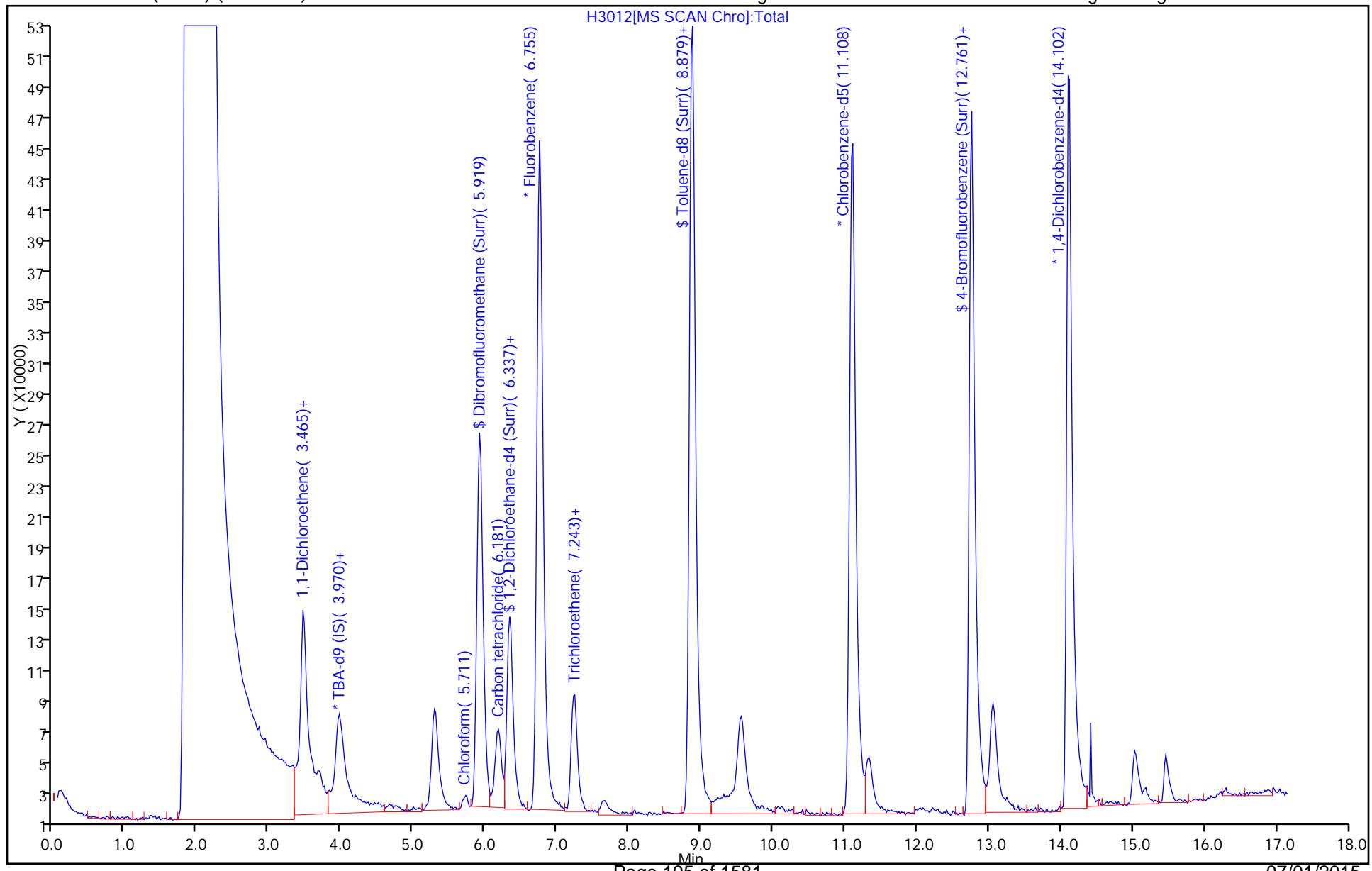
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:50:09

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

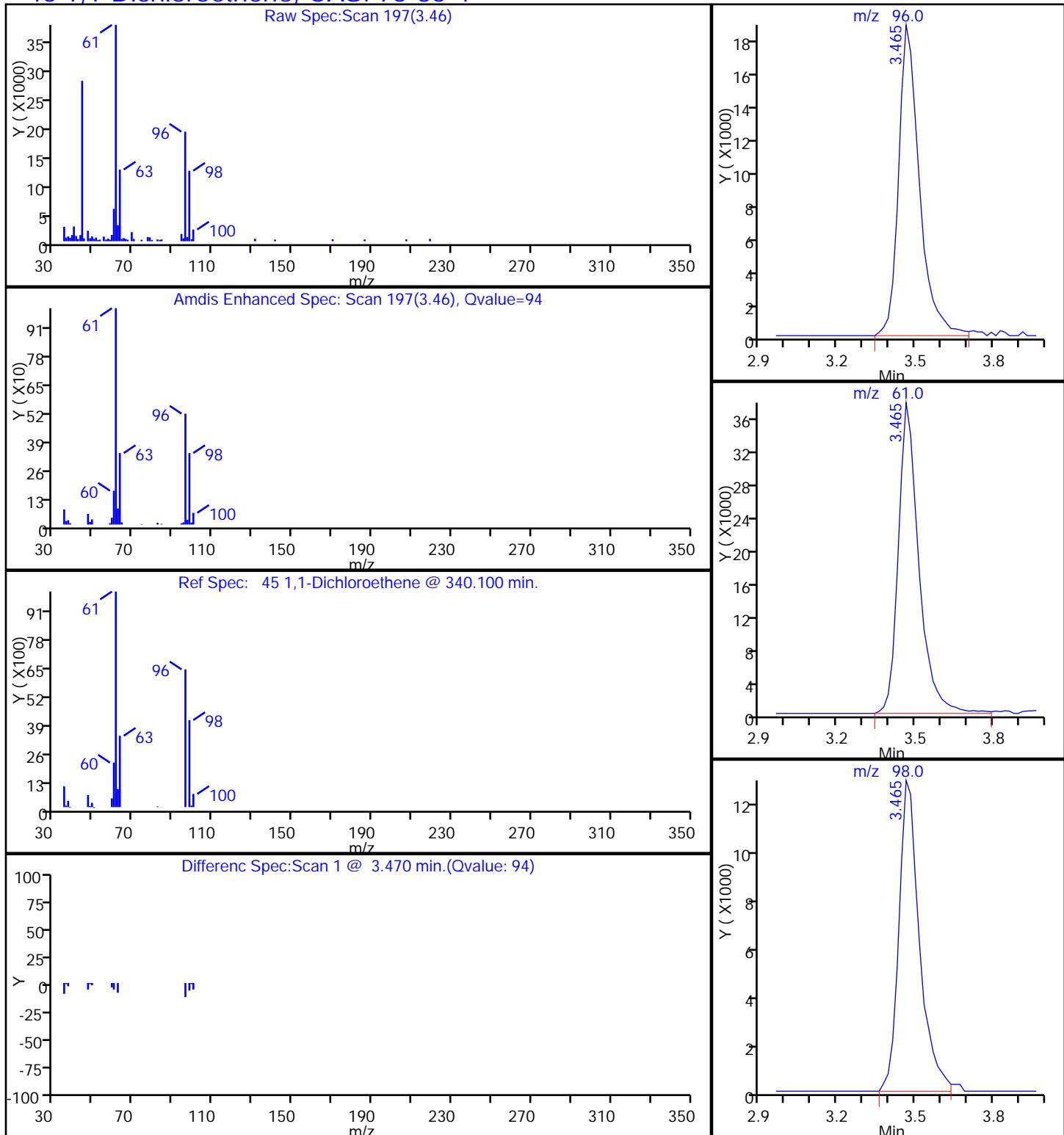
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 Injection Date: 29-May-2015 00:34:30 Instrument ID: VMS_H Operator ID: bergerb
 Lims ID: 280-69513-A-2 Lab Sample ID: 280-69513-2 Worklist Smp#: 18
 Client ID: 54400-MW53D-0515 Dil. Factor: 1.0000 ALS Bottle#: 15
 Purge Vol: 20.000 mL Limit Group: MSV - 8260B Water and Solid
 Method: AQ_VMSH_8260 Column: DB-624 (75.53) (0.53 mm)
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3012.D
 Injection Date: 29-May-2015 00:34:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-2 Lab Sample ID: 280-69513-2
 Client ID: 54400-MW53D-0515
 Operator ID: bergerb ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

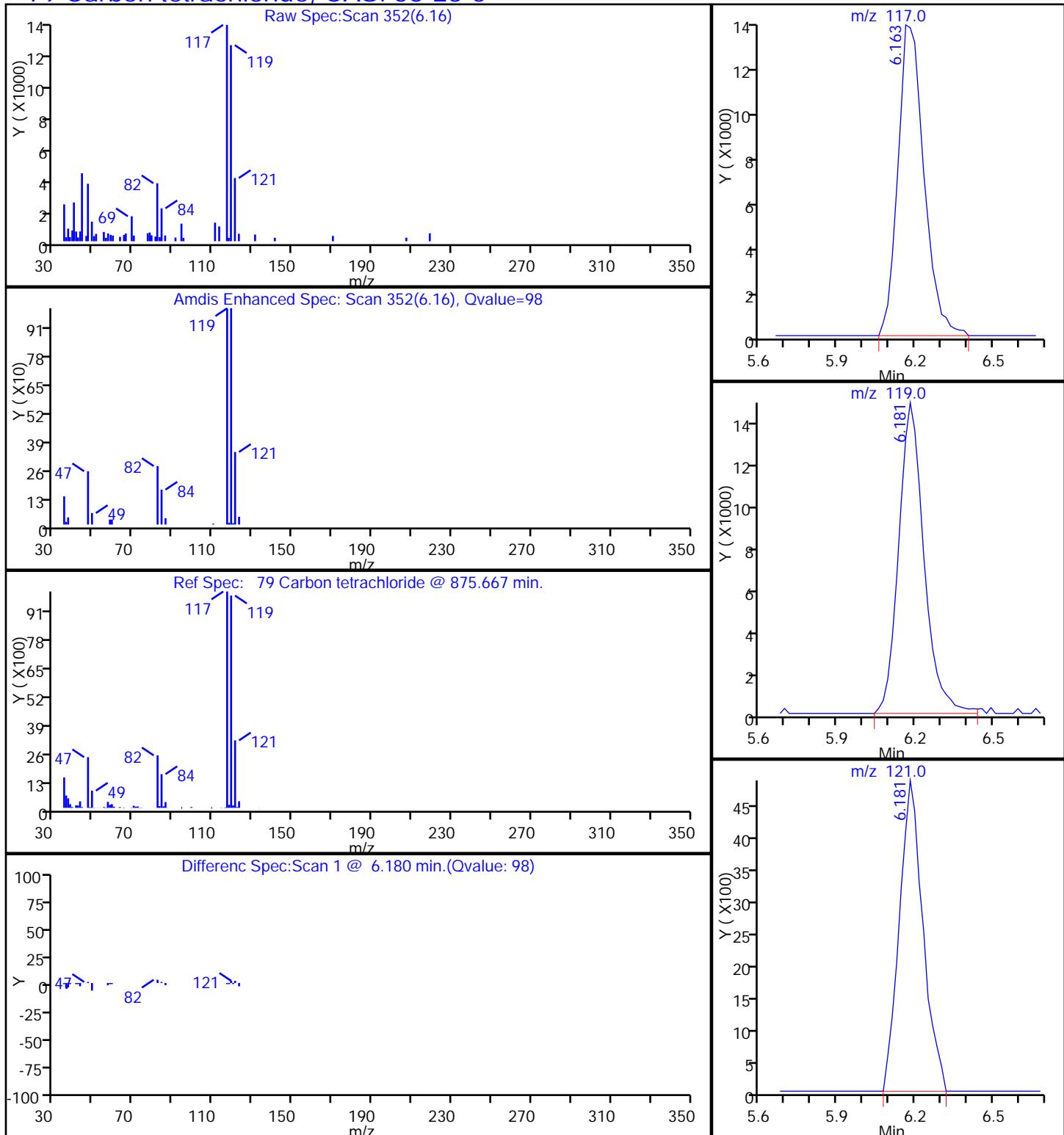
45 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3012.D
 Injection Date: 29-May-2015 00:34:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-2 Lab Sample ID: 280-69513-2
 Client ID: 54400-MW53D-0515
 Operator ID: bergerb ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector MS SCAN

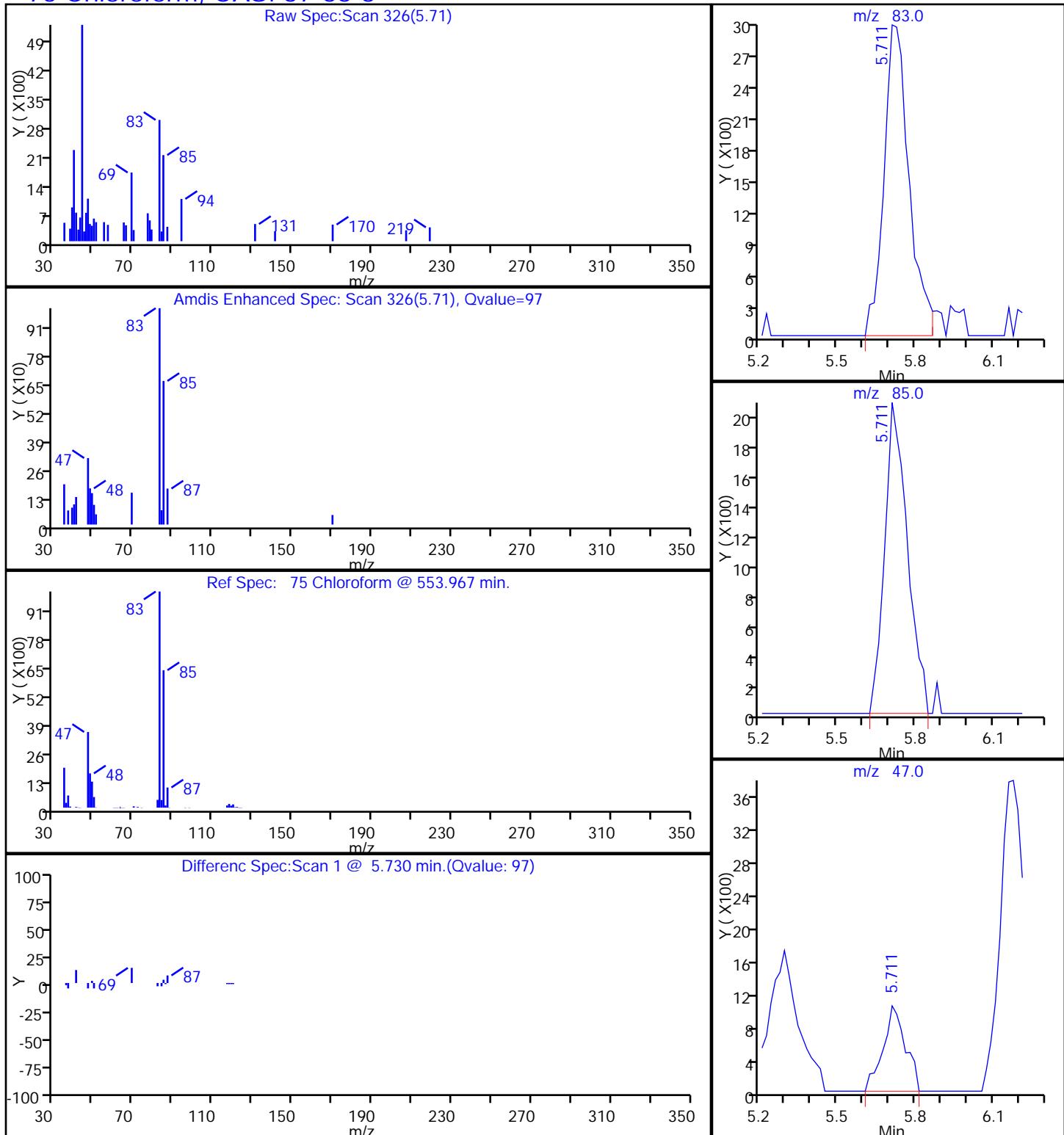
79 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Denver

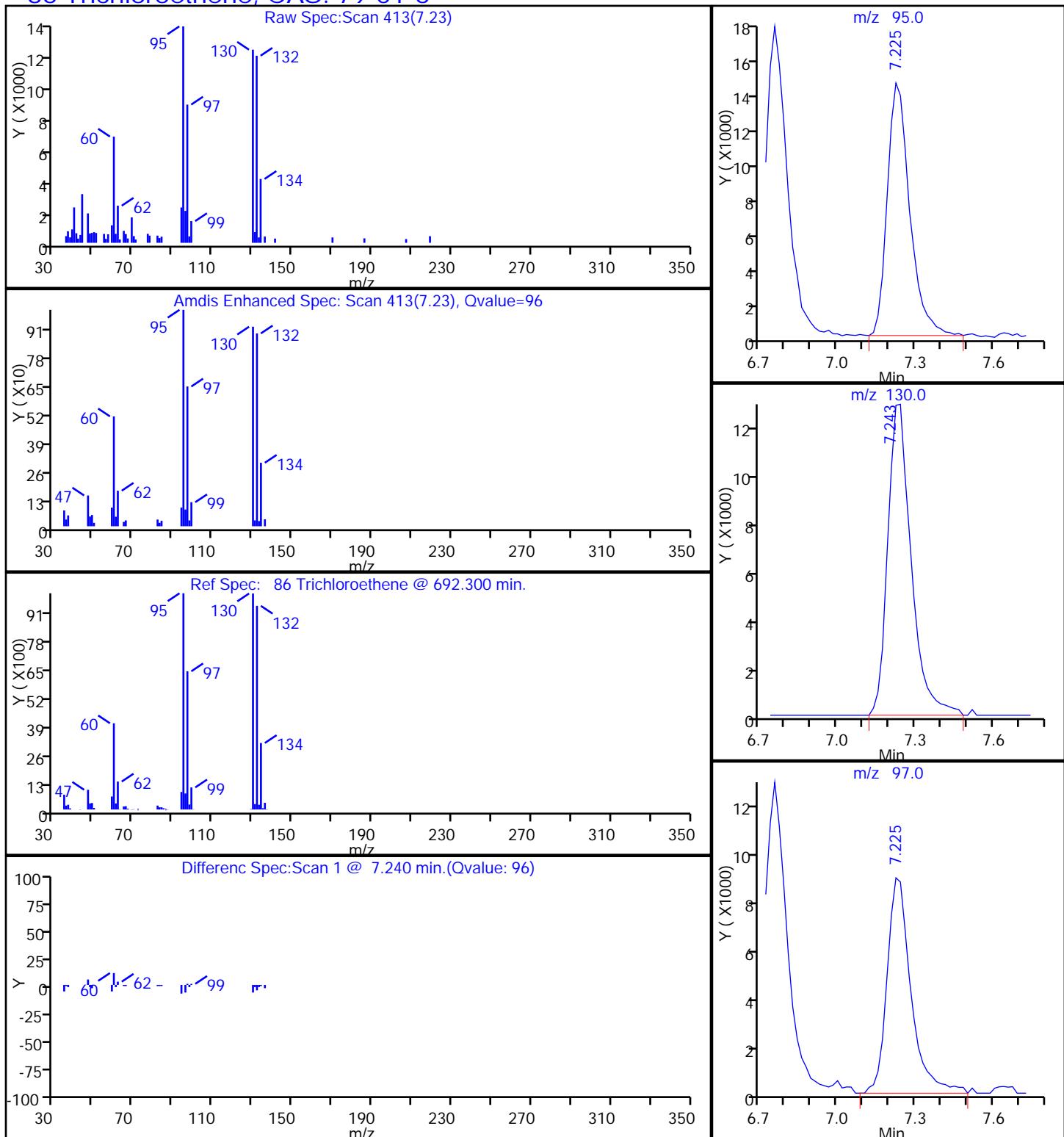
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 Injection Date: 29-May-2015 00:34:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-2 Lab Sample ID: 280-69513-2
 Client ID: 54400-MW53D-0515
 Operator ID: bergerb ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

75 Chloroform, CAS: 67-66-3



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3012.D
 Injection Date: 29-May-2015 00:34:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-2 Lab Sample ID: 280-69513-2
 Client ID: 54400-MW53D-0515
 Operator ID: bergerb ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

86 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54400-MW53S-0515

Lab Sample ID: 280-69513-3

Matrix: Water

Lab File ID: H3013.D

Analysis Method: 8260B

Date Collected: 05/19/2015 11:50

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 00:56

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	2.9		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	1.1	J	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54400-MW53S-0515

Lab Sample ID: 280-69513-3

Matrix: Water

Lab File ID: H3013.D

Analysis Method: 8260B

Date Collected: 05/19/2015 11:50

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 00:56

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.22	J	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.33	J	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	14		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.:
Client Sample ID: 54400-MW53S-0515 Lab Sample ID: 280-69513-3
Matrix: Water Lab File ID: H3013.D
Analysis Method: 8260B Date Collected: 05/19/2015 11:50
Sample wt/vol: 20 (mL) Date Analyzed: 05/29/2015 00:56
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: DB-624 (75.53) ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 279458 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	100		85-114
1868-53-7	Dibromofluoromethane (Surr)	98		80-119
2037-26-5	Toluene-d8 (Surr)	98		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3
 Client ID: 54400-MW53S-0515
 Sample Type: Client
 Inject. Date: 29-May-2015 00:56:30 ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: 280-69513-A-3 pH<2
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:49:10 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:49:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.976	3.970	0.006	99	212439	250.0	
* 2 Fluorobenzene	96	6.762	6.755	0.007	97	1199399	12.5	
* 3 1,4-Dioxane-d8	96		8.670				ND	
* 4 Chlorobenzene-d5	119	11.096	11.090	0.006	92	282192	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.108	14.102	0.006	97	422000	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.908	5.920	-0.012	93	504425	8.33	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.344	6.337	0.007	83	270183	8.05	
\$ 10 Toluene-d8 (Surr)	98	8.868	8.862	0.006	95	1146222	8.33	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.750	12.744	0.006	80	614141	8.50	
28 Dichlorodifluoromethane	85		2.159				ND	
30 Chloromethane	50		2.246				ND	
32 Vinyl chloride	62		2.385				ND	
35 Bromomethane	94		2.681				ND	
36 Chloroethane	64		2.751				ND	
38 Trichlorofluoromethane	101		2.977				ND	
45 1,1-Dichloroethene	96	3.471	3.465	0.006	94	102903	2.87	
47 Acetone	43		3.500				ND	
50 Carbon disulfide	76		3.709				ND	
54 Methylene Chloride	84		3.935				ND	
55 2-Methyl-2-propanol	59		4.057				ND	
58 trans-1,2-Dichloroethene	96		4.231				ND	
56 Methyl tert-butyl ether	73		4.231				ND	
60 1,1-Dichloroethane	63		4.684				ND	
67 2-Butanone (MEK)	43		5.345				ND	
66 2,2-Dichloropropane	77		5.363				ND	
65 cis-1,2-Dichloroethene	96	5.334	5.363	-0.029	84	13403	0.3301	
73 Chlorobromomethane	128		5.641				ND	
75 Chloroform	83	5.717	5.711	0.006	95	17332	0.2181	
76 1,1,1-Trichloroethane	97		5.972				ND	
78 1,1-Dichloropropene	75		6.146				ND	
79 Carbon tetrachloride	117	6.170	6.181	-0.011	97	80940	1.15	
81 Benzene	78		6.407				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
82 1,2-Dichloroethane	62		6.425				ND	
86 Trichloroethene	95	7.232	7.225	0.007	97	720866	14.1	
90 1,2-Dichloropropane	63		7.521				ND	
92 Dibromomethane	93		7.678				ND	
94 Dichlorobromomethane	83		7.887				ND	
97 cis-1,3-Dichloropropene	75		8.479				ND	
98 4-Methyl-2-pentanone (MIBK)	43		8.705				ND	
99 Toluene	91		8.966				ND	
100 trans-1,3-Dichloropropene	75		9.280				ND	
102 1,1,2-Trichloroethane	97		9.541				ND	
103 Tetrachloroethene	164		9.750				ND	
104 1,3-Dichloropropane	76		9.785				ND	
105 2-Hexanone	43		9.906				ND	
108 Chlorodibromomethane	129		10.133				ND	
109 Ethylene Dibromide	107		10.324				ND	
111 Chlorobenzene	112		11.143				ND	
112 1,1,2-Tetrachloroethane	131		11.282				ND	
113 Ethylbenzene	106		11.317				ND	
114 m-Xylene & p-Xylene	106		11.491				ND	
115 o-Xylene	106		12.065				ND	
116 Styrene	104		12.083				ND	
117 Bromoform	173		12.344				ND	
118 Isopropylbenzene	105		12.553				ND	
122 Bromobenzene	156		12.936				ND	
121 1,1,2,2-Tetrachloroethane	83		12.936				ND	
123 1,2,3-Trichloropropane	110		12.988				ND	
125 N-Propylbenzene	120		13.075				ND	
126 2-Chlorotoluene	126		13.179				ND	
127 1,3,5-Trimethylbenzene	105		13.284				ND	
128 4-Chlorotoluene	126		13.301				ND	
129 tert-Butylbenzene	119		13.667				ND	
130 1,2,4-Trimethylbenzene	105		13.719				ND	
131 sec-Butylbenzene	134		13.911				ND	
132 1,3-Dichlorobenzene	146		14.032				ND	
133 4-Isopropyltoluene	119		14.067				ND	
134 1,4-Dichlorobenzene	146		14.137				ND	
137 n-Butylbenzene	91		14.503				ND	
138 1,2-Dichlorobenzene	146		14.520				ND	
139 1,2-Dibromo-3-Chloropropan	157		15.303				ND	
144 1,2,3-Trichlorobenzene	180		16.069				ND	
142 Hexachlorobutadiene	225		16.226				ND	
143 Naphthalene	128		16.296				ND	
141 1,2,4-Trichlorobenzene	180		16.522				ND	

Reagents:

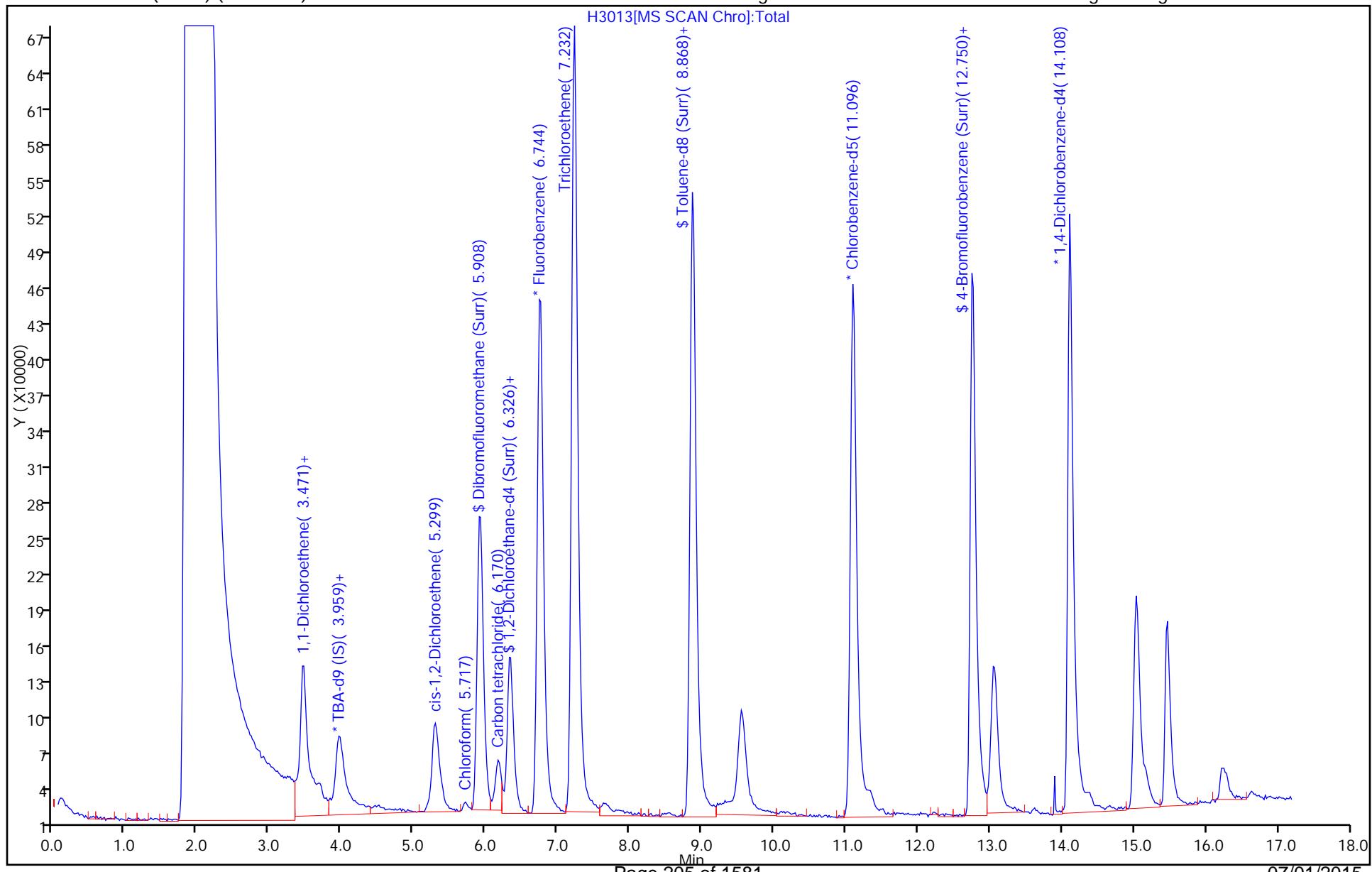
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:49:10

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

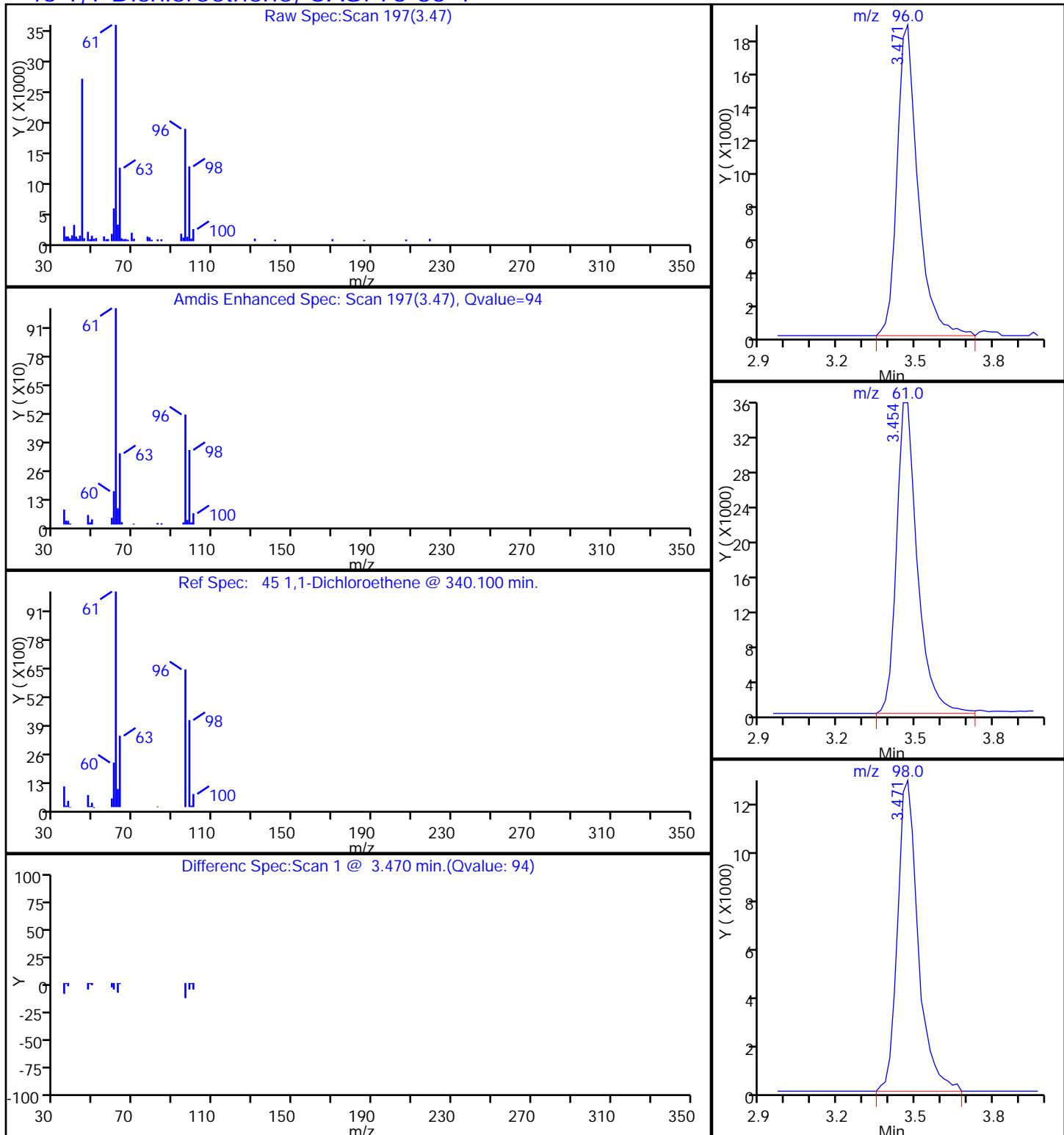
Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Injection Date: 29-May-2015 00:56:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3 Operator ID: bergerb
 Client ID: 54400-MW53S-0515 Dil. Factor: 1.0000 Worklist Smp#: 19
 Purge Vol: 20.000 mL Limit Group: MSV - 8260B Water and Solid
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Injection Date: 29-May-2015 00:56:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3
 Client ID: 54400-MW53S-0515
 Operator ID: bergerb ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

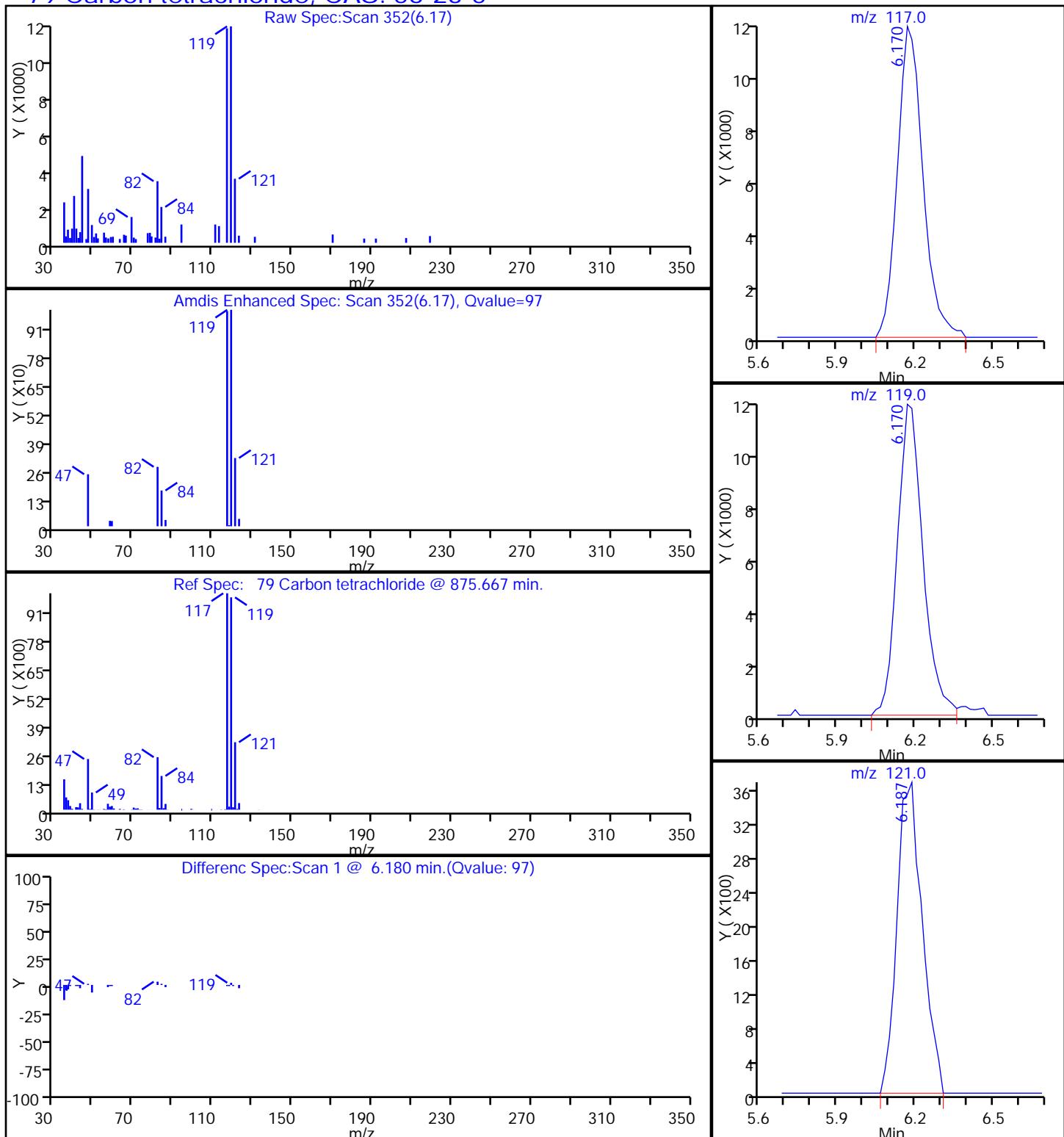
45 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Injection Date: 29-May-2015 00:56:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3
 Client ID: 54400-MW53S-0515
 Operator ID: bergerb ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

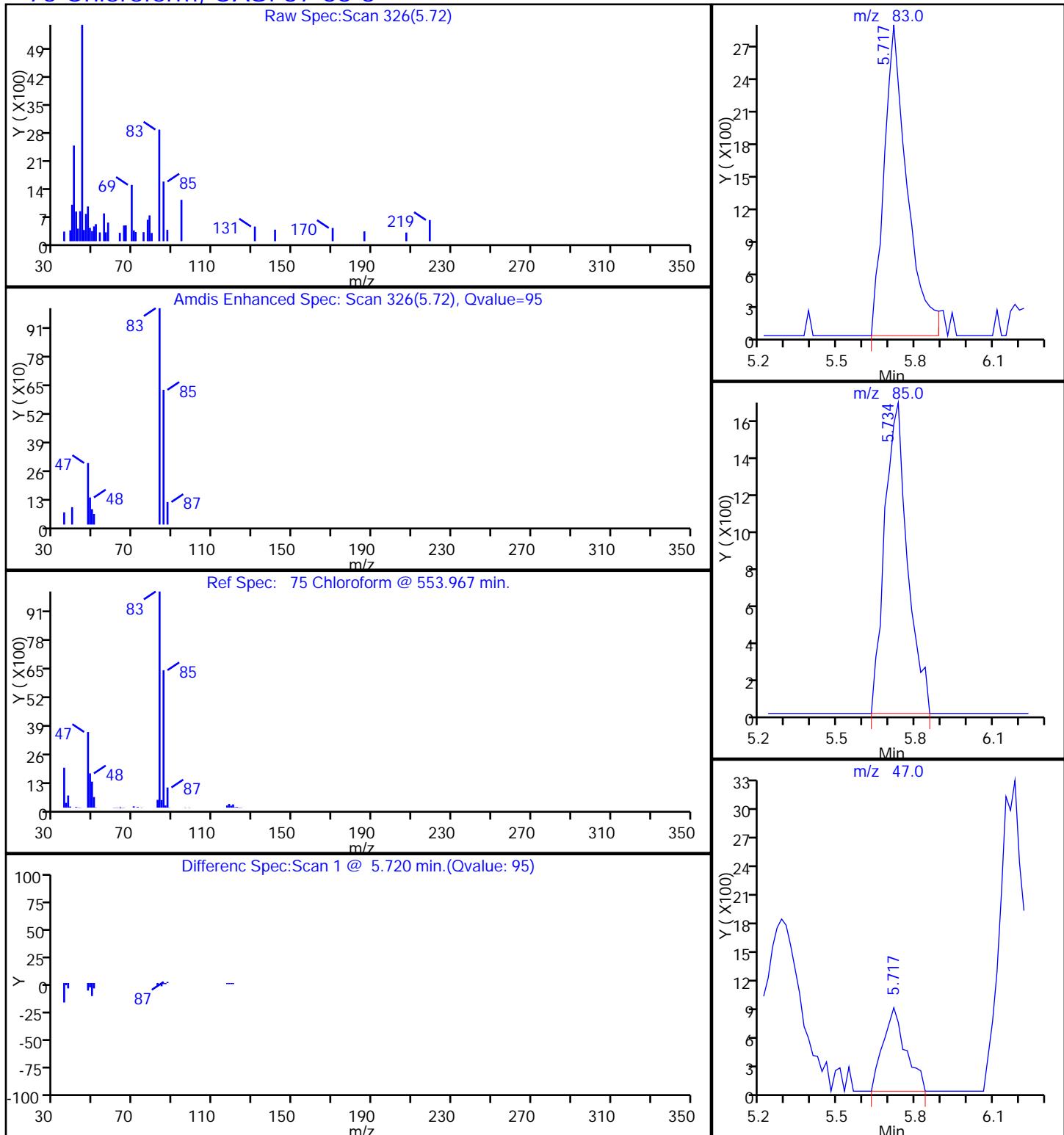
79 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Denver

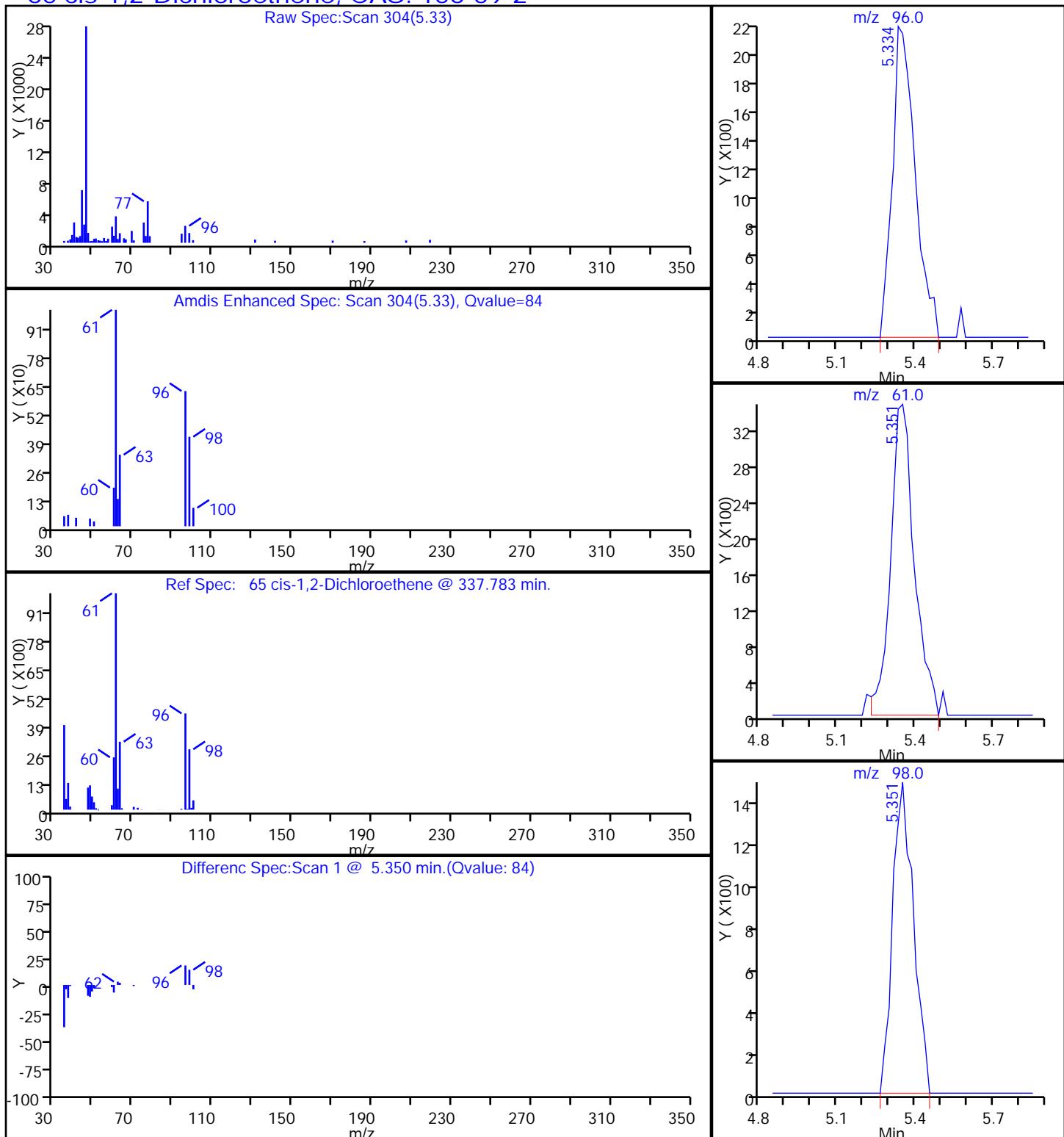
Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Injection Date: 29-May-2015 00:56:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3
 Client ID: 54400-MW53S-0515
 Operator ID: bergerb ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

75 Chloroform, CAS: 67-66-3



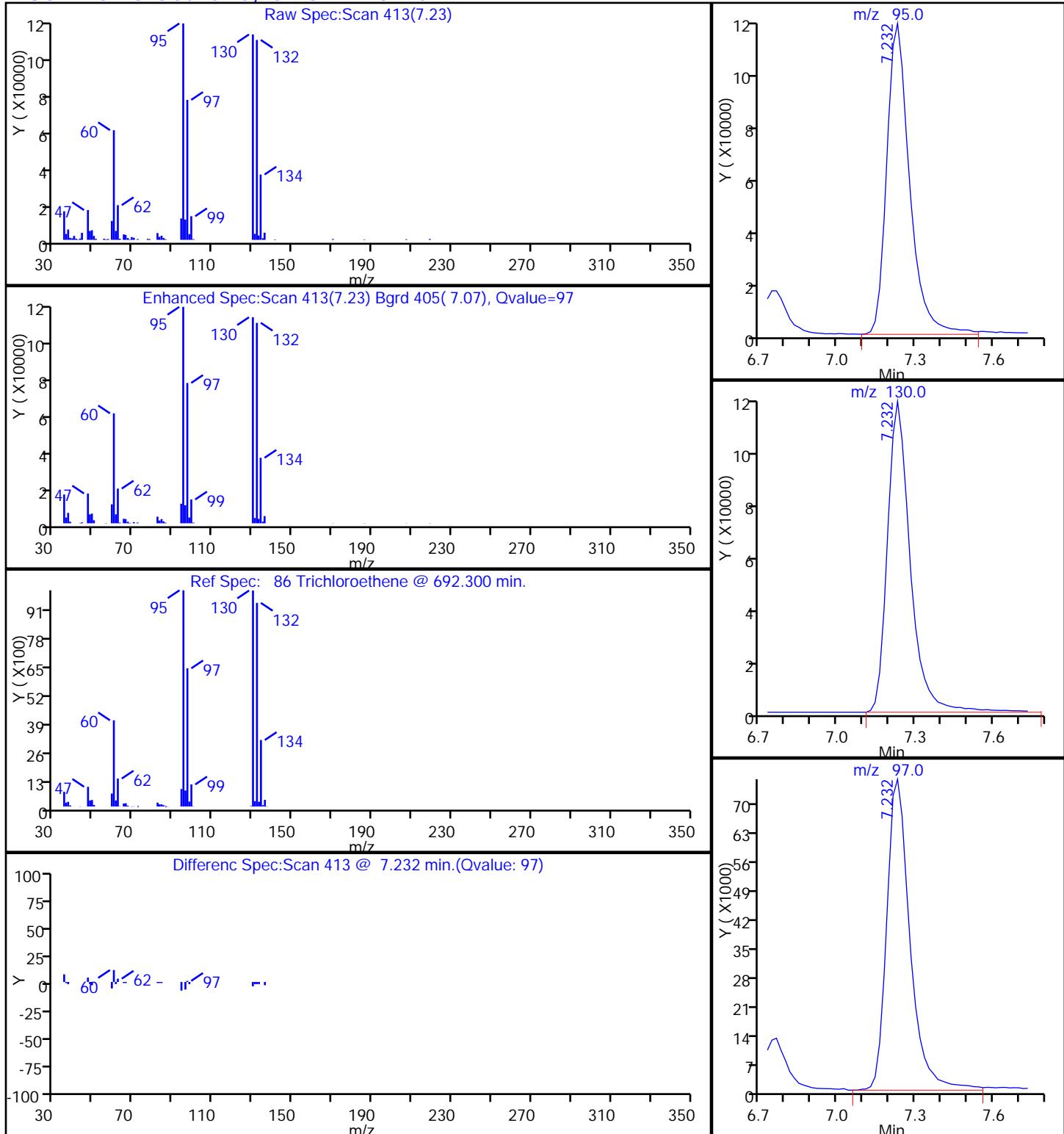
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Injection Date: 29-May-2015 00:56:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3
 Client ID: 54400-MW53S-0515
 Operator ID: bergerb ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector MS SCAN

65 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3013.D
 Injection Date: 29-May-2015 00:56:30 Instrument ID: VMS_H
 Lims ID: 280-69513-A-3 Lab Sample ID: 280-69513-3
 Client ID: 54400-MW53S-0515
 Operator ID: bergerb ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

86 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54402-EB17-0515

Lab Sample ID: 280-69513-4

Matrix: Water

Lab File ID: H3014.D

Analysis Method: 8260B

Date Collected: 05/19/2015 16:50

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 01:19

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54402-EB17-0515

Lab Sample ID: 280-69513-4

Matrix: Water

Lab File ID: H3014.D

Analysis Method: 8260B

Date Collected: 05/19/2015 16:50

Sample wt/vol: 20 (mL)

Date Analyzed: 05/29/2015 01:19

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.:
Client Sample ID: 54402-EB17-0515 Lab Sample ID: 280-69513-4
Matrix: Water Lab File ID: H3014.D
Analysis Method: 8260B Date Collected: 05/19/2015 16:50
Sample wt/vol: 20 (mL) Date Analyzed: 05/29/2015 01:19
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: DB-624 (75.53) ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 279458 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		81-118
460-00-4	4-Bromofluorobenzene (Surr)	100		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	98		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3014.D
 Lims ID: 280-69513-A-4 Lab Sample ID: 280-69513-4
 Client ID: 54402-EB17-0515
 Sample Type: Client
 Inject. Date: 29-May-2015 01:19:30 ALS Bottle#: 17 Worklist Smp#: 20
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: 280-69513-A-4 pH<2
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:48:16 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:48:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.970	3.970	0.000	99	222679	250.0	
* 2 Fluorobenzene	96	6.755	6.755	0.000	97	1181922	12.5	
* 3 1,4-Dioxane-d8	96		8.670				ND	
* 4 Chlorobenzene-d5	119	11.107	11.090	0.017	92	274528	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.119	14.102	0.017	98	423292	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.919	5.920	-0.001	93	502642	8.42	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.337	6.337	0.000	83	260749	7.88	
\$ 10 Toluene-d8 (Surr)	98	8.879	8.862	0.017	95	1117165	8.34	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.761	12.744	0.017	80	617311	8.52	
28 Dichlorodifluoromethane	85		2.159				ND	
30 Chloromethane	50		2.246				ND	
32 Vinyl chloride	62		2.385				ND	
35 Bromomethane	94		2.681				ND	
36 Chloroethane	64		2.751				ND	
38 Trichlorofluoromethane	101		2.977				ND	
45 1,1-Dichloroethene	96		3.465				ND	
47 Acetone	43		3.500				ND	
50 Carbon disulfide	76		3.709				ND	
54 Methylene Chloride	84		3.935				ND	
55 2-Methyl-2-propanol	59		4.057				ND	
58 trans-1,2-Dichloroethene	96		4.231				ND	
56 Methyl tert-butyl ether	73		4.231				ND	
60 1,1-Dichloroethane	63		4.684				ND	
67 2-Butanone (MEK)	43		5.345				ND	
66 2,2-Dichloropropane	77		5.363				ND	
65 cis-1,2-Dichloroethene	96		5.363				ND	
73 Chlorobromomethane	128		5.641				ND	
75 Chloroform	83		5.711				ND	
76 1,1,1-Trichloroethane	97		5.972				ND	
78 1,1-Dichloropropene	75		6.146				ND	
79 Carbon tetrachloride	117		6.181				ND	
81 Benzene	78		6.407				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
82 1,2-Dichloroethane	62	6.425					ND	
86 Trichloroethene	95	7.225					ND	
90 1,2-Dichloropropane	63	7.521					ND	
92 Dibromomethane	93	7.678					ND	
94 Dichlorobromomethane	83	7.887					ND	
97 cis-1,3-Dichloropropene	75	8.479					ND	
98 4-Methyl-2-pentanone (MIBK)	43	8.705					ND	
99 Toluene	91	8.966					ND	
100 trans-1,3-Dichloropropene	75	9.280					ND	
102 1,1,2-Trichloroethane	97	9.541					ND	
103 Tetrachloroethene	164	9.750					ND	
104 1,3-Dichloropropane	76	9.785					ND	
105 2-Hexanone	43	9.906					ND	
108 Chlorodibromomethane	129	10.133					ND	
109 Ethylene Dibromide	107	10.324					ND	
111 Chlorobenzene	112	11.143					ND	
112 1,1,2-Tetrachloroethane	131	11.282					ND	
113 Ethylbenzene	106	11.317					ND	
114 m-Xylene & p-Xylene	106	11.491					ND	
115 o-Xylene	106	12.065					ND	
116 Styrene	104	12.083					ND	
117 Bromoform	173	12.344					ND	
118 Isopropylbenzene	105	12.553					ND	
122 Bromobenzene	156	12.936					ND	
121 1,1,2,2-Tetrachloroethane	83	12.936					ND	
123 1,2,3-Trichloropropane	110	12.988					ND	
125 N-Propylbenzene	120	13.075					ND	
126 2-Chlorotoluene	126	13.179					ND	
127 1,3,5-Trimethylbenzene	105	13.284					ND	
128 4-Chlorotoluene	126	13.301					ND	
129 tert-Butylbenzene	119	13.667					ND	
130 1,2,4-Trimethylbenzene	105	13.719					ND	
131 sec-Butylbenzene	134	13.911					ND	
132 1,3-Dichlorobenzene	146	14.032					ND	
133 4-Isopropyltoluene	119	14.067					ND	
134 1,4-Dichlorobenzene	146	14.137					ND	
137 n-Butylbenzene	91	14.503					ND	
138 1,2-Dichlorobenzene	146	14.520					ND	
139 1,2-Dibromo-3-Chloropropan	157	15.303					ND	
144 1,2,3-Trichlorobenzene	180	16.069					ND	
142 Hexachlorobutadiene	225	16.226					ND	
143 Naphthalene	128	16.296					ND	
141 1,2,4-Trichlorobenzene	180	16.522					ND	

Reagents:

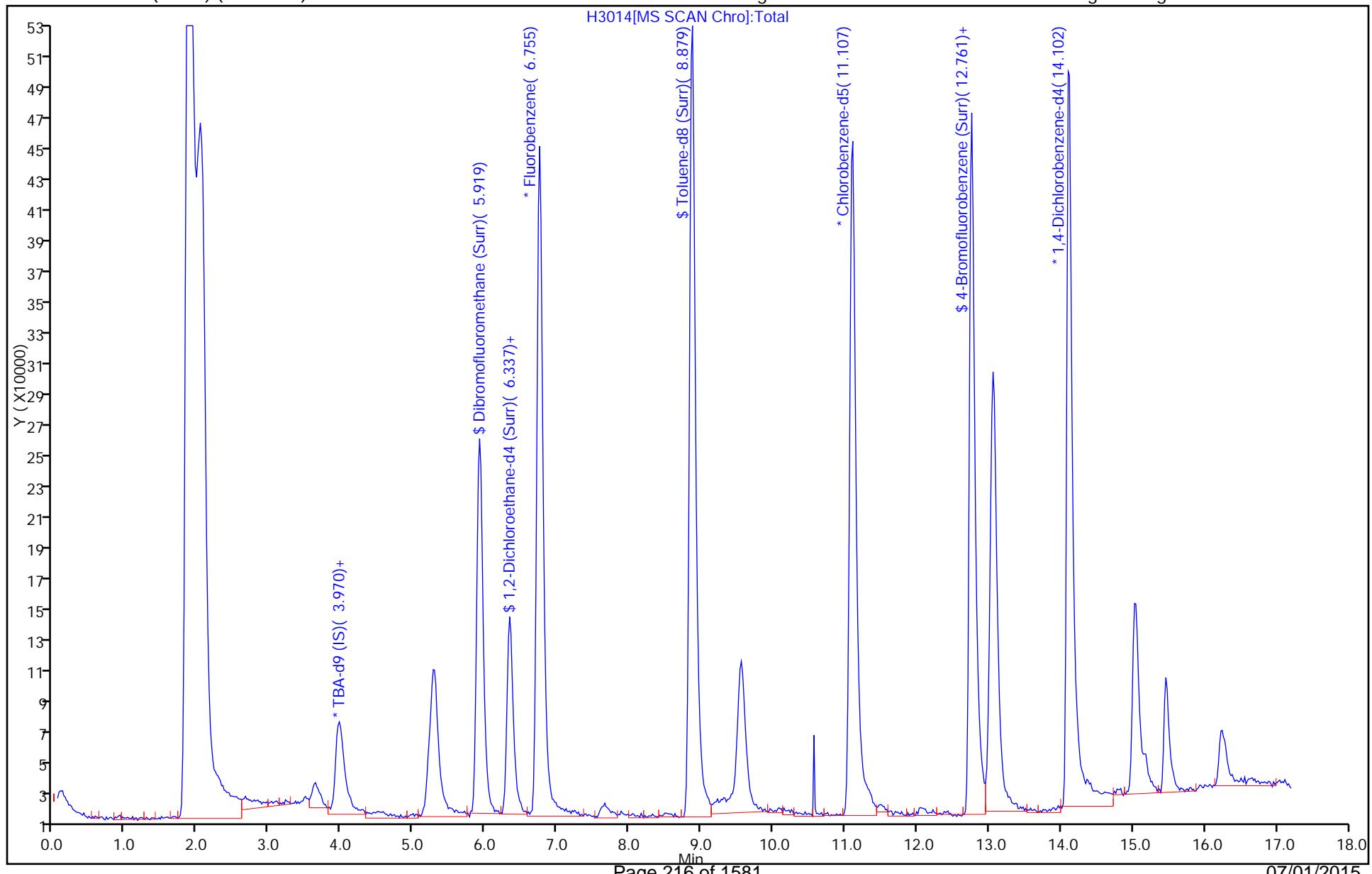
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:48:17

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3014.D
 Injection Date: 29-May-2015 01:19:30 Instrument ID: VMS_H Operator ID: bergerb
 Lims ID: 280-69513-A-4 Lab Sample ID: 280-69513-4 Worklist Smp#: 20
 Client ID: 54402-EB17-0515
 Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5

Matrix: Solid (TCLP)

Lab File ID: P4816.D

Analysis Method: 8260B

Date Collected: 05/19/2015 16:30

Sample wt/vol: 2 (mL)

Date Analyzed: 06/03/2015 00:40

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (60.25) ID: 0.25 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 280068

Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-43-2	Benzene	0.0040	U	0.010	0.0040	0.0016
78-93-3	2-Butanone (MEK)	0.040	U	0.10	0.040	0.018
56-23-5	Carbon tetrachloride	0.0040	U	0.010	0.0040	0.0019
108-90-7	Chlorobenzene	0.0040	U	0.010	0.0040	0.0017
67-66-3	Chloroform	0.0040	U	0.010	0.0040	0.0016
107-06-2	1,2-Dichloroethane	0.0040	U	0.010	0.0040	0.0013
75-35-4	1,1-Dichloroethene	0.0080	U	0.010	0.0080	0.0023
127-18-4	Tetrachloroethene	0.0040	U	0.010	0.0040	0.0020
79-01-6	Trichloroethene	0.0040	U	0.010	0.0040	0.0016
75-01-4	Vinyl chloride	0.0020	U	0.010	0.0020	0.0010

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	109		78-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		64-129
460-00-4	4-Bromofluorobenzene (Surr)	101		78-121
1868-53-7	Dibromofluoromethane (Surr)	114		79-119

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4816.D
 Lims ID: 280-69513-B-5-A Lab Sample ID: 280-69513-5
 Client ID: 54400-IDW01-0515
 Sample Type: Client
 Inject. Date: 03-Jun-2015 00:40:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: 280-69513-B-5-A
 Operator ID: contrerase Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:55:30 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: contrerase Date: 03-Jun-2015 01:24:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.800	-0.006	93	155891	250.0	
* 1 Fluorobenzene	96	7.767	7.774	-0.007	97	1383810	12.5	
* 2 Chlorobenzene-d5	119	10.020	10.026	-0.006	91	322488	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.871	0.000	97	450541	12.5	
* 149 1,4-Dioxane-d8	96	0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.223	0.001	92	408824	13.7	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	99	395466	13.8	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.946	-0.006	95	1743833	13.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.898	-0.006	86	514518	12.1	
27 Vinyl chloride	62	4.378					ND	
43 1,1-Dichloroethene	96	5.551					ND	
61 2-Butanone (MEK)	43	6.838					ND	
68 Chloroform	83	7.095					ND	
74 Carbon tetrachloride	117	7.446					ND	
76 1,2-Dichloroethane	62	7.581					ND	
77 Benzene	78	7.596					ND	
79 Trichloroethene	95	8.053					ND	
97 Tetrachloroethene	164	9.405					ND	
102 Chlorobenzene	112	10.048					ND	

Reagents:

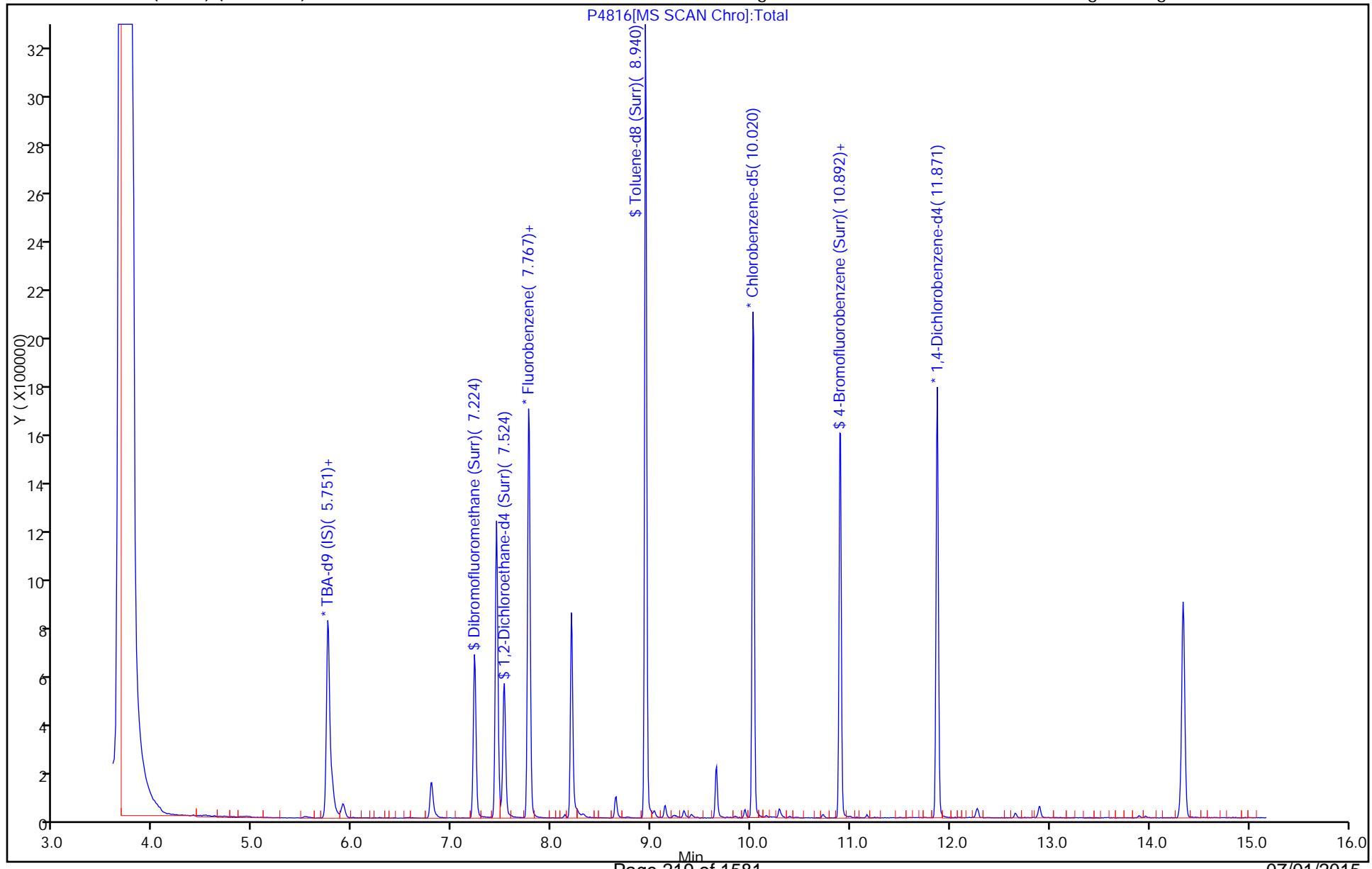
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Report Date: 03-Jun-2015 16:37:13

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4816.D
Injection Date: 03-Jun-2015 00:40:30 Instrument ID: VMS_P Operator ID: contrerase
Lims ID: 280-69513-B-5-A Lab Sample ID: 280-69513-5 Worklist Smp#: 16
Client ID: 54400-IDW01-0515
Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 16
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: 54400-IDW02-0515

Lab Sample ID: 280-69513-6

Matrix: Solid (TCLP)

Lab File ID: P4822.D

Analysis Method: 8260B

Date Collected: 05/19/2015 16:35

Sample wt/vol: 2 (mL)

Date Analyzed: 06/03/2015 02:37

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (60.25) ID: 0.25 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 280068

Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-43-2	Benzene	0.0040	U	0.010	0.0040	0.0016
78-93-3	2-Butanone (MEK)	0.040	U	0.10	0.040	0.018
56-23-5	Carbon tetrachloride	0.0040	U	0.010	0.0040	0.0019
108-90-7	Chlorobenzene	0.0040	U	0.010	0.0040	0.0017
67-66-3	Chloroform	0.0040	U	0.010	0.0040	0.0016
107-06-2	1,2-Dichloroethane	0.0040	U	0.010	0.0040	0.0013
75-35-4	1,1-Dichloroethene	0.0080	U	0.010	0.0080	0.0023
127-18-4	Tetrachloroethene	0.0040	U	0.010	0.0040	0.0020
79-01-6	Trichloroethene	0.0040	U	0.010	0.0040	0.0016
75-01-4	Vinyl chloride	0.0020	U	0.010	0.0020	0.0010

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	110		78-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-129
460-00-4	4-Bromofluorobenzene (Surr)	100		78-121
1868-53-7	Dibromofluoromethane (Surr)	108		79-119

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4822.D
 Lims ID: 280-69513-B-6-A Lab Sample ID: 280-69513-6
 Client ID: 54400-IDW02-0515
 Sample Type: Client
 Inject. Date: 03-Jun-2015 02:37:30 ALS Bottle#: 22 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: 280-69513-B-6-A 1mL
 Operator ID: contrerase Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 16:37:27 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: seifertj Date: 03-Jun-2015 07:02:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.787	5.800	-0.013	92	160064	250.0	
* 1 Fluorobenzene	96	7.767	7.774	-0.007	98	1493147	12.5	
* 2 Chlorobenzene-d5	119	10.020	10.026	-0.006	91	335782	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.871	0.000	98	471323	12.5	
* 149 1,4-Dioxane-d8	96	0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.223	0.001	92	417891	12.9	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.517	7.524	-0.007	99	403176	13.0	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.946	-0.006	95	1827920	13.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.898	-0.006	85	534297	12.0	
27 Vinyl chloride	62	4.378					ND	
43 1,1-Dichloroethene	96	5.551					ND	
61 2-Butanone (MEK)	43	6.838					ND	
68 Chloroform	83	7.095					ND	
74 Carbon tetrachloride	117	7.446					ND	
76 1,2-Dichloroethane	62	7.581					ND	
77 Benzene	78	7.596					ND	
79 Trichloroethene	95	8.053					ND	
97 Tetrachloroethene	164	9.405					ND	
102 Chlorobenzene	112	10.048					ND	

Reagents:

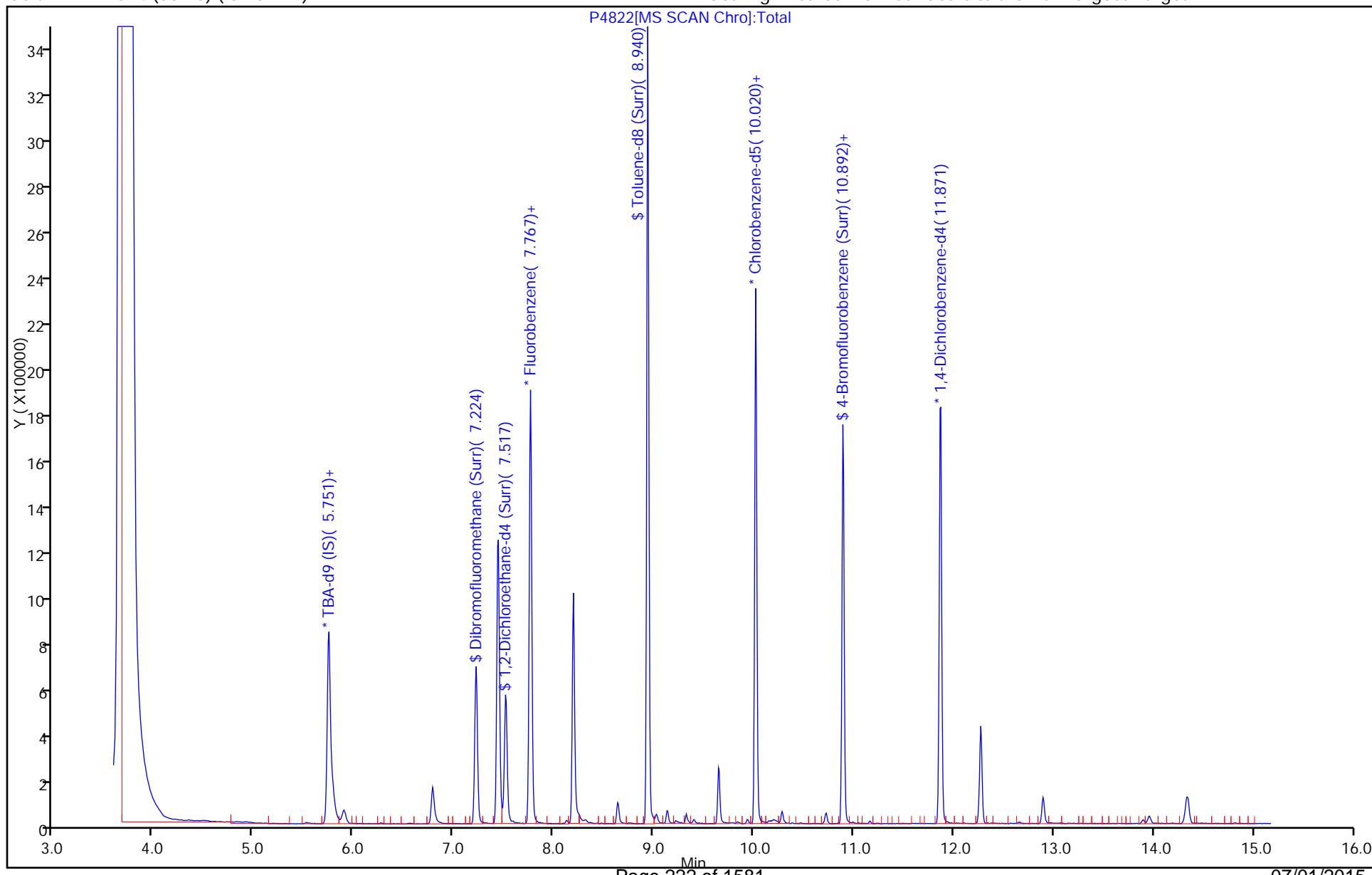
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Report Date: 03-Jun-2015 16:37:27

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4822.D
 Injection Date: 03-Jun-2015 02:37:30 Instrument ID: VMS_P Operator ID: contrerase
 Lims ID: 280-69513-B-6-A Lab Sample ID: 280-69513-6 Worklist Smp#: 17
 Client ID: 54400-IDW02-0515 Dil. Factor: 1.0000 ALS Bottle#: 22
 Purge Vol: 20.000 mL Limit Group: MSV - 8260B Water and Solid
 Method: AQ_VMSP_8260 Column: DB-624 (60.25) (0.25 mm)
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-279265/9	H2949.D
Level 2	IC 280-279265/10	H2950.D
Level 3	IC 280-279265/16	H2957.D
Level 4	IC 280-279265/11	H2951.D
Level 5	IC 280-279265/17	H2958.D
Level 6	IC 280-279265/12	H2952.D
Level 7	IC 280-279265/18	H2959.D
Level 8	IC 280-279265/13	H2953.D
Level 9	ICIS 280-279265/19	H2960.D
Level 10	IC 280-279265/14	H2954.D
Level 11	IC 280-279265/20	H2961.D
Level 12	IC 280-279265/15	H2955.D
Level 13	IC 280-279265/21	H2962.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.6723 0.6000 0.6115	0.4976 0.5781	0.3764 0.6182	Lin1 -0.059	0.6083										0.9970		0.9900
Chloromethane	0.4489 0.3934 0.3949	0.3613 0.3985	0.3243 0.4034	Ave 0.3892						0.1000	9.9	15.0					
Vinyl chloride	0.4524 0.3876 0.3996	0.3441 0.3885	0.2908 0.4015	Ave 0.3807						13.3	30.0						
Bromomethane	+++++ 0.3222	0.3214 0.3209	0.2639 0.3308	Ave 0.3159						8.3	15.0						
Chloroethane	+++++ 0.2504	0.2352 0.2250	0.1895 0.2400	Ave 0.2314						9.7	15.0						
Dichlorofluoromethane	+++++ 0.8860	0.7676 0.8901	0.6763 0.9126	Ave 0.8394						11.4	15.0						
Trichlorofluoromethane	0.8693 0.7802 0.7941	0.6684 0.7970	0.5425 0.8047	Ave 0.7509						14.6	15.0						

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Ethanol	0.0007	0.0007	+++++	0.0008	0.0010	Lin2	0.0307	0.0007							0.9900		0.9900
Ethyl ether	0.2003 0.2058	0.2017 0.2025	0.1812	0.2025	0.2004 0.1964	Ave		0.1983				4.1		15.0			
Acrolein	+++++ 0.0143	0.0144 0.0128	0.0133	0.0132 0.0139	0.0139 0.0137	Ave		0.0137				4.7		15.0			
1,1-Dichloroethene	0.3671 0.3865	0.3926 0.3668	0.3796	0.3543 0.3663	0.3663 0.3733	Ave		0.3733				3.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4658 0.5324	0.5230 0.5195	0.5231	0.4862 0.5115	0.5115 0.4868	Ave		0.5088				4.7		15.0			
Acetone	+++++ 0.0379	0.0492 0.0323	0.0392	0.0382 0.0368	0.0368 0.0382	Ave		0.0389				14.3		15.0			
Isopropyl alcohol	0.0058	0.0056 0.0057	0.0119 0.0071	0.0071	0.0057	Lin1	0.0411	0.0057							0.9910		0.9900
Iodomethane	0.8562 0.8522	0.8710 0.8233	0.8529	0.8008 0.8246	0.8246 0.8401	Ave						2.9		15.0			
Carbon disulfide	1.6352 1.4559	1.4538 1.4345	1.3951	1.3036 1.3982	1.3982 1.4395	Ave						7.0		15.0			
Acetonitrile	0.0071	0.0080 0.0071	0.0146 0.0073	0.0073	0.0087	Lin1	0.0770	0.0069							0.9990		0.9900
3-Chloro-1-propene	0.8931 0.8831	0.9161 0.8649	0.8251	0.8389 0.8450	0.8450 0.8666	Ave						3.8		15.0			
Methyl acetate	0.1100 0.1258	0.1397 0.1340	0.1181	0.1233 0.1305	0.1305 0.1259	Ave						7.9		15.0			
Methylene Chloride	0.8126 0.3553	0.4695 0.3418	0.3052	0.3828 0.3180	0.3180 0.3159	Lin2	0.1493	0.3159							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
tert-Butyl alcohol	+++++ 1.2969	1.3926 1.2128 1.1641	1.7105 1.1830	1.1830	Lin1	5.3164	1.1627								0.9980		0.9900
Acrylonitrile	0.0302 0.0323	0.0334 0.0318	0.0338	0.0328 0.0337	Ave		0.0326					4.0		15.0			
trans-1,2-Dichloroethene	0.4404 0.4346	0.4148 0.4140	0.4140	0.4093 0.4127	Ave		0.4200					2.9		15.0			
Methyl tert-butyl ether	0.7576 0.7187	0.7327 0.7318	0.6878 0.7009	Ave		0.7116						4.9		15.0			
Hexane	3.0006 3.4517	3.3718 3.5541 3.6328	3.0644 3.3922	Ave		3.3525						7.1		15.0			
1,1-Dichloroethane	0.9471 0.8848	0.9425 0.8645	0.8754	0.8306 0.8618	Ave		0.8867				0.1000	4.9		15.0			
Vinyl acetate	0.5168 0.5940 0.5493	0.5011 0.5655	0.5143	0.6027	Ave		0.5491					7.3		15.0			
Isopropyl ether		0.2877 0.2828	0.3030 0.2790	0.2930	Ave		0.2894					2.9		15.0			
2-Chloro-1,3-butadiene		0.6685 0.6516	0.7001 0.6427	0.6438	Ave		0.6594					3.3		15.0			
Tert-butyl ethyl ether		1.1257 1.0900	1.3981 1.0854	1.1483	1.1926	Ave		1.1733				10.0		15.0			
cis-1,2-Dichloroethene	0.4228 0.4250 0.4157	0.4367 0.4329	0.4097 0.4198	Ave		0.4232						2.2		15.0			
2-Butanone (MEK)	+++++ 0.0702	0.0715 0.0799	0.0572 0.0801	Ave		0.0717						11.7		15.0			
2,2-Dichloropropane	+++++ 0.8679	1.3131 0.7976 0.7323	0.9827 0.7466	Lin2	0.5711	0.7306									0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Ethyl acetate	0.1556	0.1515	0.1738 0.1551	0.1740	0.1417	Ave		0.1586				8.1		15.0			
Propionitrile	0.0111	0.0111	0.0119 0.0111	0.0118	0.0108	Ave		0.0113				4.0		15.0			
sec-Butyl Alcohol	2.2045 1.6075	1.9139 1.6511	1.6589	1.7994	1.6941	Ave		1.7899				11.8		15.0			
Methacrylonitrile	0.0985	0.0966	0.1009 0.0964	0.1044	0.0977	Ave		0.0991				3.1		15.0			
Bromochloromethane	0.1801 0.1879	0.1777 0.1849	0.1923	0.1861	0.1908	Ave		0.1857				2.9		15.0			
Tetrahydrofuran	+++++ 0.0504	0.0556 0.0481	0.0538	0.0499 0.0519	Ave		0.0516					5.3		15.0			
Chloroform	0.8073 0.8459 0.8014	0.8850	0.8295	0.8135	0.8140	Ave		0.8281				3.5		30.0			
1,1,1-Trichloroethane	0.7686 0.8114	0.8150	0.8042	0.7482 0.7899	Ave		0.7908					3.1		15.0			
Cyclohexane	0.8385 0.8987	0.8786 0.8804	0.8952	0.8351 0.8806	Ave		0.8724					2.9		15.0			
1,1-Dichloropropene	0.7960 0.7165 0.6834	0.7245	0.6931	0.6655 0.6830	Ave		0.7089					6.1		15.0			
Carbon tetrachloride	0.6918 0.7587	0.7452	0.7484	0.6952 0.7478	Ave		0.7352					3.9		15.0			
Isobutyl alcohol	+++++ 0.6033	0.6782 0.6080	0.6248	0.5861 0.6614	Ave		0.6270					5.7		15.0			
Benzene	1.2801 1.3345	1.2923 1.3211	1.3291	1.2793 1.3300	Ave		1.3095					1.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,2-Dichloroethane	+++++ 0.4011	0.4104 0.4019	0.3966 0.3699	0.3938	Ave		0.3956					3.5		15.0			
Tert-amyl methyl ether		0.9239 0.8876	0.9842 0.8734	0.9163 0.9553	Ave		0.9234					4.5		15.0			
n-Butanol		0.0030 0.0035	0.0030 0.0035	0.0036	0.0031	Ave		0.0033				9.0		15.0			
Trichloroethene	0.5069 0.5523	0.5289 0.5462	0.5490	0.5005 0.5435	Ave		0.5325					4.0		15.0			
2-Pentanone	0.2203 0.1925	0.1928 0.1834	0.2110	0.1887 0.2039	Ave		0.1989					6.7		15.0			
Methylcyclohexane	0.6575 0.8057	0.8259 0.8011	0.8100	0.7402 0.8003	Ave		0.7772					7.6		15.0			
1,2-Dichloropropane	0.5032 0.5220	0.5643 0.4938	0.5226	0.5400 0.5158	Ave		0.5231					4.5		30.0			
Methyl methacrylate		0.0526 0.0516	0.0659 0.0501	0.0535	0.0590	Ave		0.0554				10.8		15.0			
Dibromomethane	0.2801 0.2602	0.2660 0.2402	0.2617	0.2613 0.2555	Ave		0.2607					4.6		15.0			
1,4-Dioxane	+++++ 0.0014	0.0007 0.0015	0.0010 0.0017	0.0017	Lin2	-0.019	0.0016								0.9930		0.9900
Bromodichloromethane	0.7144 0.7636	0.7605 0.7600	0.7933	0.7698 0.7673	Ave		0.7613					3.1		15.0			
2-Nitropropane		0.0439	0.0412 0.0436	0.0387	0.0388	Ave		0.0409				5.8		15.0			
2-Chloroethyl vinyl ether	+++++ 0.0912	0.0991 0.1032	0.0880	0.0734 0.1061	Ave		0.0935					12.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
cis-1,3-Dichloropropene	2.6750 3.0354	2.9221 3.0904 2.9872		2.9018 3.0016		Ave		2.9448				4.6		15.0			
4-Methyl-2-pentanone (MIBK)	0.3442 0.2584	0.2140 0.2956 0.2551		0.1914 0.2850		Lin1	-0.015	0.2662							0.9940		0.9900
Toluene	1.5176 1.5073	1.5648 1.4939 1.4821		1.4427 1.4985		Ave		1.5010				2.5		30.0			
trans-1,3-Dichloropropene	+++++ 0.4928	0.4849 0.4522		0.4764 0.4890		Ave		0.4794				3.0		15.0			
Ethyl methacrylate	1.4143 1.8201	2.0173 1.9026 1.7673		1.8930 1.8399		Ave		1.8078				10.5		15.0			
1,1,2-Trichloroethane	+++++ 0.3015	0.3418 0.2655		0.3160 0.2927		Ave		0.3008				8.7		15.0			
Tetrachloroethylene	1.7265 2.0994	2.0522 2.2172		2.1402 1.9269		Ave		2.0336				8.0		15.0			
1,3-Dichloropropane	2.0988 2.2579	2.4754 2.2014		2.3859 2.3518		Ave		2.2920				5.4		15.0			
2-Hexanone	0.8284 0.7622	0.5682 0.8838 0.8273		0.5759 0.8677		Lin1	-0.441	0.8408							0.9970		0.9900
Chlorodibromomethane	2.0740 2.1696	2.2728 2.2722		2.2949 2.2269		Ave		2.2311				3.7		15.0			
1,2-Dibromoethane	1.4087 1.5822	1.5346 1.6757		1.5748 1.6216		Ave		1.5725				5.4		15.0			
1-Chlorohexane	3.5084 3.4695	3.5102 3.4262 3.5732		3.2136 3.3481		Ave		3.4356				3.5		15.0			
Chlorobenzene	4.2365 4.5461	4.4956 4.6525 4.6390		4.3619 4.4491		Ave		4.4830				0.3000	3.3	15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,1,2-Tetrachloroethane	1.9485 2.2117	2.1740 2.2529	2.2682	2.0985 2.1970	Ave		2.1644				5.1	15.0					
Ethylbenzene	2.0226 2.3517	2.2833 2.4001	2.4311	2.2308 2.2784	Ave		2.2854				5.9	30.0					
m-Xylene & p-Xylene	2.7785 3.1931	3.2773 3.2936	3.2573	2.7671 3.1810	Ave		3.1068				7.5	15.0					
o-Xylene	2.3533 2.7913	2.7308 2.8656	2.8595	2.7161 2.7643	Ave		2.7258				6.4	15.0					
Styrene	3.5913 4.5450	4.6319 4.6297	4.6479	4.3307 4.4769	Ave		4.4076				8.6	15.0					
Bromoform	0.9867 1.2372	1.1494 1.2669	1.3191	1.1764 1.2908	Ave		1.2038			0.1000	9.4	15.0					
Isopropylbenzene	5.4727 5.3868	5.6583 5.2474	5.4075	5.1944 5.1269	Ave		5.3563				3.4	15.0					
cis-1,4-Dichloro-2-butene		0.2326 0.2175	0.1743 0.2075	0.2412 0.2477	Ave		0.2201				12.2	15.0					
Cyclohexanone	0.0349 0.0259	0.0206 0.0268	0.0302	0.0202 0.0297	Lin1	-0.048	0.0278							0.9950	0.9900		
Bromobenzene	1.1416 1.2551	1.2656 1.2243	1.2789	1.2435 1.2364	Ave		1.2351				3.6	15.0					
1,1,2,2-Tetrachloroethane	+++++ 1.0798	1.2715 0.9706	1.1278	1.1702 1.0692	Ave		1.1148			0.3000	9.1	15.0					
1,2,3-Trichloropropane	0.3027 0.2509	0.2823 0.2211	0.2561	0.2746 0.2371	Ave		0.2607				10.7	15.0					
trans-1,4-Dichloro-2-butene	+++++ 0.2927	0.3626 0.2477	0.2773	0.3113 0.2638	Ave		0.2926				14.0	15.0					

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
N-Propylbenzene	1.3235 1.3387	1.3607 1.2774	1.3273	1.3060 1.2435	Ave		1.3110					3.0		15.0			
2-Chlorotoluene	1.0409 0.9993	1.0630 0.9879	1.0298	1.0278 0.9625	Ave		1.0159					3.4		15.0			
1,3,5-Trimethylbenzene	4.3251 4.0485	4.1323 3.9378	4.0787	3.9955 3.8462	Ave		4.0520					3.8		15.0			
4-Chlorotoluene	1.2606 1.2821	1.3873 1.3034	1.3287	1.3303 1.2985	Ave		1.3130					3.1		15.0			
tert-Butylbenzene	4.6423 4.4055	4.6148 4.2623	4.4069	4.2619 4.1731	Ave		4.3952					4.1		15.0			
1,2,4-Trimethylbenzene	4.0915 3.8496	4.0242 3.6791	3.8806	3.7664 3.6503	Ave		3.8488					4.3		15.0			
sec-Butylbenzene	1.1536 1.1749	1.1761 1.1523	1.1754	1.1802 1.1084	Ave		1.1601					2.2		15.0			
1,3-Dichlorobenzene	1.9475 1.8356	1.9603 1.8624	1.9028	1.8447 1.7807	Ave		1.8763					3.4		15.0			
p-Isopropyltoluene	4.7453 5.0878	5.1707 4.9754	5.1332	4.9774 4.8357	Ave		4.9894					3.1		15.0			
1,4-Dichlorobenzene	2.8174 2.9420	2.9928 2.8150	2.8873	2.9475 2.8860	Ave		2.8983					2.3		15.0			
1,2,3-Trimethylbenzene		3.3584 3.3707	3.5005 3.2562	3.3184	Ave		3.3437					2.7		15.0			
n-Butylbenzene	5.5526 5.2917	5.3840 5.1507	5.2530	5.0266 5.0251	Ave		5.2405					3.7		15.0			
1,2-Dichlorobenzene	1.8994 1.9763	2.0125 1.9437	2.0142	1.9990 1.9400	Ave		1.9693					2.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,2-Dibromo-3-Chloropropane	0.1626 0.1845	0.1878 0.1967 0.1780	0.1877 0.1896	Ave	0.1839					5.9	15.0						
1,2,4-Trichlorobenzene	1.1294 1.3379	1.3450 1.3612	1.3818 1.3498	Ave	1.3228					6.5	15.0						
Hexachlorobutadiene	1.3053 1.3864	1.4295 1.4103 1.3957	1.3888 1.3363	Ave	1.3789					3.1	15.0						
Naphthalene	1.4838 1.4704	1.5211 1.5652 1.4722	1.4986 1.5272	Ave	1.5055					2.3	15.0						
1,2,3-Trichlorobenzene	0.9921 1.0521	1.0799 1.0743 1.0578	0.9593 1.0776	Ave	1.0419					4.5	15.0						
Dibromofluoromethane (Surr)	0.5930	0.6035 0.5948	0.7139 0.6162	Ave	0.6313					7.7	15.0						
1,2-Dichloroethane-d4 (Surr)	0.3283	0.3380 0.3301	0.3801 0.3483	Ave	0.3497					6.4	15.0						
Toluene-d8 (Surr)	6.5381	5.8804 5.6946	6.4381 5.7403	Ave	6.0984					6.1	15.0						
4-Bromofluorobenzene (Surr)	2.0194	2.0522 1.9707	2.5577 1.9809	Ave	2.1394					10.7	15.0						

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-279265/9	H2949.D
Level 2	IC 280-279265/10	H2950.D
Level 3	IC 280-279265/16	H2957.D
Level 4	IC 280-279265/11	H2951.D
Level 5	IC 280-279265/17	H2958.D
Level 6	IC 280-279265/12	H2952.D
Level 7	IC 280-279265/18	H2959.D
Level 8	IC 280-279265/13	H2953.D
Level 9	ICIS 280-279265/19	H2960.D
Level 10	IC 280-279265/14	H2954.D
Level 11	IC 280-279265/20	H2961.D
Level 12	IC 280-279265/15	H2955.D
Level 13	IC 280-279265/21	H2962.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 11	LVL 12	LVL 13	LVL 10	LVL 10
Dichlorodifluoromethane	FB	Lin1	17035 247178	42175 3195464	490322	61856	1582945	0.300 5.00	1.00 60.0	10.0	2.00	30.0
Chloromethane	FB	Ave	11373 162089	30623 2063538	338017	53286	1032956	0.300 5.00	1.00 60.0	10.0	2.00	30.0
Vinyl chloride	FB	Ave	11464 159681	29166 2088314	329568	47784	1028076	0.300 5.00	1.00 60.0	10.0	2.00	30.0
Bromomethane	FB	Ave	+++++ 132730	27242 1677127	285208	43358	847148	+++++ 5.00	1.00 60.0	10.0	2.00	30.0
Chloroethane	FB	Ave	+++++ 103163	19936 1175653	210596	31142	614520	+++++ 5.00	1.00 60.0	10.0	2.00	30.0
Dichlorofluoromethane	FB	Ave	+++++ 365019	65058 4651419	766394	111136	2336784	+++++ 5.00	1.00 60.0	10.0	2.00	30.0
Trichlorofluoromethane	FB	Ave	22025 321455	56652 4149850	675996	89150	2060386	0.300 5.00	1.00 60.0	10.0	2.00	30.0
Ethanol	FB	Lin2	92015	15621	+++++	33859	9004		250	+++++	500	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265
SDG No.: _____
Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N
Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl ether	FB	Ave	5076 84807	17097 946871	171739	32923	502993	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
Acrolein	FB	Ave	+++++ 59073	12221 670949	113181	21672	354662	+++++ 50.0 600	10.00 100.0	20.0 300		
1,1-Dichloroethene	FB	Ave	9301 159253	33271 1917053	321941	58222	937902	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	11802 219337	44325 2715137	443684	79903	1309750	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
Acetone	FB	Ave	+++++ 62422	16671 674850	132884	25083	376529	+++++ 20.0 240	4.00 40.0	8.00 120		
Isopropyl alcohol	FB	Lin1		24803 156601	10503 312090		10028		50.0 600	10.0 100		20.0
Iodomethane	FB	Ave	21695 351110	73821 4302574	723408	131594	2111383	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
Carbon disulfide	FB	Ave	41433 599818	123216 7290483	1216758	214216	3580245	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
Acetonitrile	FB	Lin1		43880 239466	16071 480531		19392		62.5 750	12.5 125		25.0
3-Chloro-1-propene	FB	Ave	22629 363829	77645 4311947	733581	137857	2163538	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
Methyl acetate	FB	Ave	13933 259179	59188 3085396	568374	101327	1670946	1.50 25.0 300	5.00 50.0	10.0 150		
Methylene Chloride	FB	Lin2	20589 146368	39793 1594879	289949	62909	814145	0.300 5.00 60.0	1.00 10.0	2.00 30.0		
tert-Butyl alcohol	TBA	Lin1	+++++ 50634	10757 530360	103361	25764	300590	+++++ 50.0 600	10.0 100	20.0 300		

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
Acrylonitrile	FB	Ave	7644 132956	28348 1661461	53920 863563			3.00 50.0 600	10.0 100		20.0 300	
trans-1,2-Dichloroethene	FB	Ave	11159 179063	35154 2163767	351195 67262			0.300 5.00 60.0	1.00 10.0		2.00 30.0	
Methyl tert-butyl ether	FB	Ave	19196 296103	62101 3405326	620688 113032			0.300 5.00 60.0	1.00 10.0		2.00 30.0	
Hexane	CBZ	Ave	18384 314081	64190 4048497	656745 113407			0.300 5.00 60.0	1.00 10.0		2.00 30.0	
1,1-Dichloroethane	FB	Ave	23998 364528	79883 4517987	742521 136484			0.300 5.00 60.0	1.00 10.0		2.00 30.0	
Vinyl acetate	FB	Ave	26188 489475	84948 5740935	959261 169021			0.600 10.0 120	2.00 20.0		4.00 60.0	
Isopropyl ether	FB	Ave		158619 949648	33342 1898580			64479 37.5		1.25 75.0	12.5	2.50
2-Chloro-1,3-butadiene	FB	Ave		294842 1750155	61627 3499683			115265 30.0		1.00 60.0	10.0	2.00
Tert-butyl ethyl ether	FB	Ave			153824 620642			264567 37.5		1.25 75.0	12.5	2.50
cis-1,2-Dichloroethene	FB	Ave	10712 175089	37013 2172564	367183 67321			1074834 5.00 60.0	1.00 10.0		2.00 30.0	
2-Butanone (MEK)	FB	Ave	+++++ 115653	24233 1491424	271060 37612			820646 20.0 240	4.00 40.0		8.00 120	
2,2-Dichloropropane	FB	Lin2	+++++ 357591	111289 3826816	676578 161477			1911674 5.00 60.0	1.00 10.0		2.00 30.0	
Ethyl acetate	FB	Ave		133601 835914	30591 1689137			50291 60.0		2.00 10.0 120	20.0	4.00

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
Propionitrile	FB	Ave	374048	61262	13113	752658	130541	23893	375	62.5	12.5	25.0
sec-Butyl Alcohol	TBA	Ave	15358 188288	44351 2256681	81308	424147	1291377	9.00 150	30.0	300	60.0	900
Methacrylonitrile	FB	Ave	2645878	426154	88804	5249270	925891	173321	300	50.0	10.0	20.0
Bromochloromethane	FB	Ave	4564 77430	15065 966337	30589	163111	488660	0.300 5.00	1.00	10.0	2.00	30.0
Tetrahydrofuran	FB	Ave	+++++ 41570	9425 502514	91342	16390	265724	+++++ 10.0	2.00	20.0	4.00	60.0
Chloroform	FB	Ave	20454 348497	75009 4188258	133676	703605	2084195	0.300 5.00	1.00	10.0	2.00	30.0
1,1,1-Trichloroethane	FB	Ave	19475 334275	69076 4170262	682150	122948	2022539	0.300 5.00	1.00	10.0	2.00	30.0
Cyclohexane	FB	Ave	21245 370277	74464 4600736	759284	137225	2254936	0.300 5.00	1.00	10.0	2.00	30.0
1,1-Dichloropropene	FB	Ave	20169 295185	61407 3571391	587910	109356	1748830	0.300 5.00	1.00	10.0	2.00	30.0
Carbon tetrachloride	FB	Ave	17528 312599	63160 3967597	634790	114248	1914881	0.300 5.00	1.00	10.0	2.00	30.0
Isobutyl alcohol	TBA	Ave	+++++ 58888	13096 692521	133112	22070	420168	+++++ 125	25.0	250	50.0	750
Benzene	FB	Ave	32434 549811	109532 6903972	1127346	210215	3405649	0.300 5.00	1.00	10.0	2.00	30.0
1,2-Dichloroethane	FB	Ave	+++++ 165237	34787 1932916	340868	65169	1008279	+++++ 5.00	1.00	10.0	2.00	30.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
Tert-amyl methyl ether	FB	Ave	2980183	509379	108283 5944725	1058840	203262	37.5	6.25 75.0	1.25 12.5	2.50	
n-Butanol	FB	Ave	237384	32899	6625 479232	80688	13826	750	125 1500	25.0 250	50.0	
Trichloroethene	FB	Ave	12844 227548	44827 2854202	465659	82244 1391651	0.300 5.00	1.00 60.0	10.0	2.00	30.0	
2-Pentanone	FB	Ave	22323 317235	65366 3833019	715858	124028 2088712	1.20 20.0	4.00 240	40.0	8.00	120	
Methylcyclohexane	FB	Ave	16660 331927	69997 4186466	687055	121641 2049189	0.300 5.00	1.00 60.0	10.0	2.00	30.0	
1,2-Dichloropropane	FB	Ave	12750 215066	47827 2580688	443299	88743 1320707	0.300 5.00	1.00 60.0	10.0	2.00	30.0	
Methyl methacrylate	FB	Ave	277060	46363	11608 545200	94799	20939	60.0	10.0 120	2.00 20.0	4.00	
Dibromomethane	FB	Ave	7097 107201	22545 1255247	221961	42931 654298	0.300 5.00	1.00 60.0	10.0	2.00	30.0	
1,4-Dioxane	FB	Lin2	+++++ 11405	1190 154119	24744	3158 87288	+++++ 100	20.0 1200	200	40.0	600	
Bromodichloromethane	FB	Ave	18101 314609	64456 3971466	672865	126497 1964681	0.300 5.00	1.00 60.0	10.0	2.00	30.0	
2-Nitropropane	FB	Ave	235853	34617	7254 474539	68670	13786	60.0	10.0 120	2.00 20.0	4.00	
2-Chloroethyl vinyl ether	FB	Ave	+++++ 37567	8401 539090	12060 271671	571072	107388 1713888	+++++ 5.00	1.00 60.0	10.0	2.00	30.0
cis-1,3-Dichloropropene	CBZ	Ave	16389 276201	55629 3329041				0.300 5.00	1.00 60.0	10.0	2.00	30.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265
SDG No.: _____
Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53 (mm)) Heated Purge: (Y/N) N
Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 11	LVL 12	LVL 13	LVL 9	LVL 10	LVL 11	LVL 12	LVL 13
4-Methyl-2-pentanone (MIBK)	FB	Lin1	34884 425851	72563 5332900	1002764	125802	2918765	1.20 20.0 240	4.00 40.0	8.00	120	
Toluene	FB	Ave	38452 621009	132622 7745216	1267160	237075	3836921	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
trans-1,3-Dichloropropene	FB	Ave	+++++ 203021	41101 2363176	414785	78291	1231322	+++++ 5.00	1.00 10.0	2.00	30.0	
Ethyl methacrylate	CBZ	Ave	8665 165619	38403 1969555	351571	70056	1050575	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
1,1,2-Trichloroethane	FB	Ave	+++++ 124206	28973 1387307	248293	51927	735362	+++++ 5.00	1.00 10.0	2.00	30.0	
Tetrachloroethylene	CBZ	Ave	10578 191028	39068 2470886	395487	71310	1183439	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
1,3-Dichloropropane	CBZ	Ave	12859 205450	47124 2453301	440887	87035	1297830	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
2-Hexanone	CBZ	Lin1	20301 277410	43268 3687649	653257	85245	1981716	1.20 20.0 240	4.00 40.0	8.00	120	
Chlorodibromomethane	CBZ	Ave	12707 197422	43268 2532153	424072	82411	1317455	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
1,2-Dibromoethane	CBZ	Ave	8631 143966	29215 1794214	309647	58280	925921	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
1-Chlorohexane	CBZ	Ave	21495 315700	66824 3982029	633113	118927	1911706	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
Chlorobenzene	CBZ	Ave	25956 413665	85583 5169847	859727	161425	2540363	0.300 5.00 60.0	1.00 10.0	2.00	30.0	
1,1,1,2-Tetrachloroethane	CBZ	Ave	11938 201252	41387 2510665	419142	77661	1254447	0.300 5.00 60.0	1.00 10.0	2.00	30.0	

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
Ethylbenzene	CBZ	Ave	12392 213988	43467 2674714	449228	82557	1300912	0.300 5.00 60.0	1.00	10.0	2.00	30.0
m-Xylene & p-Xylene	CBZ	Ave	17023 290550	62391 3670522	601905	102405	1816296	0.300 5.00 60.0	1.00	10.0	2.00	30.0
o-Xylene	CBZ	Ave	14418 253986	51986 3193493	528399	100515	1578391	0.300 5.00 60.0	1.00	10.0	2.00	30.0
Styrene	CBZ	Ave	22003 413563	88179 5159432	858871	160271	2556260	0.300 5.00 60.0	1.00	10.0	2.00	30.0
Bromoform	CBZ	Ave	6045 112580	21881 1411916	243755	43536	737056	0.300 5.00 60.0	1.00	10.0	2.00	30.0
Isopropylbenzene	DCB	Ave	48827 812395	171044 10313550	1680664	305501	4996844	0.300 5.00 60.0	1.00	10.0	2.00	30.0
cis-1,4-Dichloro-2-butene	DCB	Ave		35995 206859	5565 412278	75289	15634		5.00 30.0	1.00 60.0	10.0	2.00
Cyclohexanone	CBZ	Lin1	8548 94188	15703 1194077	223269	29957	677839	12.0 200 2400	40.0 400	80.0	1200	
Bromobenzene	DCB	Ave	10185 189284	38258 2406376	397495	73134	1204988	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,1,2,2-Tetrachloroethane	DCB	Ave	+++++ 162847	38437 1907715	350506	68821	1042084	+++++ 5.00 60.0	1.00	10.0	2.00	30.0
1,2,3-Trichloropropane	DCB	Ave	2701 37836	8533 434508	79592	16148	231112	0.300 5.00 60.0	1.00	10.0	2.00	30.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 44139	10962 486849	86189	18311	257129	+++++ 5.00 60.0	1.00	10.0	2.00	30.0
N-Propylbenzene	DCB	Ave	11808 201896	41134 2510741	412525	76813	1211930	0.300 5.00 60.0	1.00	10.0	2.00	30.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279265
 SDG No.: _____
 Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53 (mm)) Heated Purge: (Y/N) N
 Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	DCB	Ave	9287 150706	32135 1941695	320058	60448	938094	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,3,5-Trimethylbenzene	DCB	Ave	38588 610567	124917 7739677	1267667	234990	3748579	0.300 5.00 60.0	1.00	10.0	2.00	30.0
4-Chlorotoluene	DCB	Ave	11247 193360	41938 2561711	412960	78238	1265565	0.300 5.00 60.0	1.00	10.0	2.00	30.0
tert-Butylbenzene	DCB	Ave	41418 664399	139500 8377315	1369653	250654	4067161	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,2,4-Trimethylbenzene	DCB	Ave	36504 580572	121648 7231176	1206077	221512	3557690	0.300 5.00 60.0	1.00	10.0	2.00	30.0
sec-Butylbenzene	DCB	Ave	10292 177196	35553 2264838	365299	69410	1080246	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,3-Dichlorobenzene	DCB	Ave	17375 276824	59259 3660427	591386	108495	1735503	0.300 5.00 60.0	1.00	10.0	2.00	30.0
p-Isopropyltoluene	DCB	Ave	42337 767309	156306 9779012	1595405	292735	4713028	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,4-Dichlorobenzene	DCB	Ave	25137 443692	90470 5532730	897375	173354	2812786	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,2,3-Trimethylbenzene	DCB	Ave	3206272	519679	6472065	111761 1016440	209412	30.0	5.00	1.00	10.0	2.00
n-Butylbenzene	DCB	Ave	49540 798058	162753 10123491	1632647	295629	4897561	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,2-Dichlorobenzene	DCB	Ave	16946 298057	60837 3820213	626018	117567	1890736	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	1451 27832	5677 349881	61145	11040	184811	0.300 5.00 60.0	1.00	10.0	2.00	30.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279265

SDG No.: _____

Instrument ID: VMS_H GC Column: DB-624 (75. ID: 0.53(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2015 00:18 Calibration End Date: 05/28/2015 05:10 Calibration ID: 22417

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7 LVL 12	LVL 3 LVL 8 LVL 13	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	DCB	Ave	10076 201768	40657 2675409	429478	79388	1320265	0.300 5.00 60.0	1.00	10.0	2.00	30.0
Hexachlorobutadiene	DCB	Ave	11646 209088	43213 2743229	438309	81678	1302417	0.300 5.00 60.0	1.00	10.0	2.00	30.0
Naphthalene	DCB	Ave	13238 221754	45982 2893523	486464	88140	1488412	0.300 5.00 60.0	1.00	10.0	2.00	30.0
1,2,3-Trichlorobenzene	DCB	Ave	8851 158675	32643 2079040	333902	56420	1050261	0.300 5.00 60.0	1.00	10.0	2.00	30.0
Dibromofluoromethane (Surr)	FB	Ave	1592725	266180 3238689	62835 546393	118288		5.00 30.0	1.00 60.0	10.0	2.00	
1,2-Dichloroethane-d4 (Surr)	FB	Ave	881719	149069 1797526	33456 308839	66325		5.00 30.0	1.00 60.0	10.0	2.00	
Toluene-d8 (Surr)	CBZ	Ave	3504937	582345 7087877	134275 1177961	255016		5.00 30.0	1.00 60.0	10.0	2.00	
4-Bromofluorobenzene (Surr)	DCB	Ave	1920918	317561	81659 3915034	142343		5.00 30.0	1.00 60.0	10.0	2.00	

Curve Type Legend:

Ave = Average ISTD

Lin1 = Linear 1/conc ISTD

Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2949.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 28-May-2015 00:18:30 ALS Bottle#: 3 Worklist Smp#: 9
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:03:28 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: moanm

Date: 02-Jun-2015 08:03:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.994	3.974	0.020	97	193515	250.0	250.0	
* 2 Fluorobenzene	96	6.762	6.759	0.003	97	1055741	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.115	11.094	0.021	91	255283	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.109	14.106	0.003	98	371746	12.5	12.5	
28 Dichlorodifluoromethane	85	2.166	2.164	0.002	95	17035	0.3000	0.4280	
30 Chloromethane	50	2.253	2.269	-0.016	95	11373	0.3000	0.3460	
31 Butadiene	54	2.375	2.373	0.002	0	9511	NC	NC	
32 Vinyl chloride	62	2.375	2.390	-0.015	87	11464	0.3000	0.3566	
35 Bromomethane	94	2.671	2.669	0.002	93	11483	0.3000	0.4304	
36 Chloroethane	64	2.758	2.756	0.002	97	8427	0.3000	0.4312	
37 Dichlorofluoromethane	67	2.932	2.930	0.002	96	30915	0.3000	0.4361	
38 Trichlorofluoromethane	101	2.985	2.982	0.003	98	22025	0.3000	0.3473	
40 Ethyl ether	59	3.228	3.226	0.002	88	5076	0.3000	0.3030	
44 Acrolein	56		3.365				ND	ND	
45 1,1-Dichloroethene	96	3.489	3.470	0.019	93	9301	0.3000	0.2950	
46 1,1,2-Trichloro-1,2,2-trif	151	3.507	3.487	0.020	93	11802	0.3000	0.2746	
47 Acetone	43	3.507	3.505	0.002	95	12647	1.20	3.85	
48 Iodomethane	142	3.646	3.644	0.002	98	21695	0.3000	0.3057	
50 Carbon disulfide	76	3.733	3.731	0.002	96	41433	0.3000	0.3408	
52 3-Chloro-1-propene	41	3.820	3.818	0.002	82	22629	0.3000	0.3092	
53 Methyl acetate	43	3.838	3.818	0.020	77	13933	1.50	1.31	
54 Methylene Chloride	84	3.960	3.957	0.003	97	20589	0.3000	0.2991	
55 2-Methyl-2-propanol	59	4.099	4.062	0.037	92	6971	3.00	3.17	
57 Acrylonitrile	53	4.203	4.201	0.002	39	7644	3.00	2.78	
58 trans-1,2-Dichloroethene	96	4.238	4.236	0.002	95	11159	0.3000	0.3146	
56 Methyl tert-butyl ether	73	4.238	4.236	0.002	91	19196	0.3000	0.3194	
59 Hexane	57	4.499	4.514	-0.015	91	18384	0.3000	0.2685	
60 1,1-Dichloroethane	63	4.691	4.688	0.003	95	23998	0.3000	0.3205	
61 Vinyl acetate	43	4.743	4.723	0.020	97	26188	0.6000	0.5647	
65 cis-1,2-Dichloroethene	96	5.352	5.367	-0.015	88	10712	0.3000	0.2997	
67 2-Butanone (MEK)	43		5.367				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.317	5.385	-0.068	80	62959	0.3000	0.2386	
71 sec-Butyl Alcohol	45	5.596	5.576	0.020	91	15358	9.00	11.1	
73 Chlorobromomethane	128	5.666	5.663	0.003	92	4564	0.3000	0.2910	
74 Tetrahydrofuran	42	5.735	5.716	0.019	41	4474	0.6000	1.03	
75 Chloroform	83	5.735	5.733	0.002	96	20454	0.3000	0.2925	
76 1,1,1-Trichloroethane	97	5.979	5.977	0.002	97	19475	0.3000	0.2916	
77 Cyclohexane	56	6.049	6.046	0.003	91	21245	0.3000	0.2883	
78 1,1-Dichloropropene	75	6.171	6.168	0.003	90	20169	0.3000	0.3369	
79 Carbon tetrachloride	117	6.188	6.186	0.002	94	17528	0.3000	0.2823	
80 Isobutyl alcohol	41		6.290				ND	ND	
81 Benzene	78	6.432	6.429	0.003	97	32434	0.3000	0.2933	
82 1,2-Dichloroethane	62		6.447				ND	ND	
84 n-Heptane	43	6.728	6.725	0.003	96	27451	0.3000	0.2803	
86 Trichloroethene	95	7.233	7.230	0.003	94	12844	0.3000	0.2856	
88 2-Pentanone	43	7.494	7.474	0.020	63	22323	1.20	1.33	
89 Methylcyclohexane	55	7.494	7.491	0.003	85	16660	0.3000	0.2538	
90 1,2-Dichloropropane	63	7.528	7.526	0.002	62	12750	0.3000	0.2886	
92 Dibromomethane	93	7.703	7.700	0.003	90	7097	0.3000	0.3223	
93 1,4-Dioxane	88		7.718				ND	ND	
94 Dichlorobromomethane	83	7.894	7.892	0.002	97	18101	0.3000	0.2815	
96 2-Chloroethyl vinyl ether	63		8.292				ND	ND	
97 cis-1,3-Dichloropropene	75	8.503	8.501	0.002	89	16389	0.3000	0.2725	
98 4-Methyl-2-pentanone (MIBK)	43	8.730	8.710	0.020	96	34884	1.20	1.61	
99 Toluene	91	8.973	8.971	0.002	98	38452	0.3000	0.3033	
100 trans-1,3-Dichloropropene	75		9.285				ND	ND	
101 Ethyl methacrylate	69	9.409	9.406	0.003	52	8665	0.3000	0.2347	
102 1,1,2-Trichloroethane	97	9.548	9.546	0.002	39	11674	0.3000	0.4595	
103 Tetrachloroethene	164	9.774	9.772	0.002	94	10578	0.3000	0.2547	
104 1,3-Dichloropropane	76	9.792	9.789	0.003	76	12859	0.3000	0.2747	
105 2-Hexanone	43	9.948	9.929	0.019	95	20301	1.20	1.71	
108 Chlorodibromomethane	129	10.157	10.155	0.002	90	12707	0.3000	0.2789	
109 Ethylene Dibromide	107	10.349	10.329	0.020	96	8631	0.3000	0.2688	
110 1-Chlorohexane	91	11.115	11.113	0.002	52	21495	0.3000	0.3064	
111 Chlorobenzene	112	11.150	11.147	0.003	86	25956	0.3000	0.2835	
112 1,1,2-Tetrachloroethane	131	11.272	11.287	-0.015	73	11938	0.3000	0.2701	
113 Ethylbenzene	106	11.324	11.322	0.002	98	12392	0.3000	0.2655	
114 m-Xylene & p-Xylene	106	11.515	11.496	0.019	97	17023	0.3000	0.2683	
115 o-Xylene	106	12.072	12.070	0.002	97	14418	0.3000	0.2590	
116 Styrene	104	12.090	12.088	0.002	95	22003	0.3000	0.2444	
117 Bromoform	173	12.334	12.349	-0.015	88	6045	0.3000	0.2459	
118 Isopropylbenzene	105	12.560	12.558	0.002	96	48827	0.3000	0.3065	
120 Cyclohexanone	55	12.699	12.697	0.002	88	8548	12.0	16.8	
122 Bromobenzene	156	12.943	12.941	0.002	92	10185	0.3000	0.2773	
121 1,1,2,2-Tetrachloroethane	83	12.960	12.958	0.002	67	14087	0.3000	0.4249	
123 1,2,3-Trichloropropane	110	12.995	12.993	0.002	79	2701	0.3000	0.3484	
124 trans-1,4-Dichloro-2-butene	53	13.030	13.028	0.002	59	1719	0.3000	0.1976	
125 N-Propylbenzene	120	13.082	13.080	0.002	99	11808	0.3000	0.3028	
126 2-Chlorotoluene	126	13.187	13.184	0.003	96	9287	0.3000	0.3074	
127 1,3,5-Trimethylbenzene	105	13.291	13.289	0.002	94	38588	0.3000	0.3202	
128 4-Chlorotoluene	126	13.326	13.306	0.020	97	11247	0.3000	0.2880	
129 tert-Butylbenzene	119	13.674	13.672	0.002	95	41418	0.3000	0.3169	
130 1,2,4-Trimethylbenzene	105	13.726	13.724	0.002	95	36504	0.3000	0.3189	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.918	13.916	0.002	94	10292	0.3000	0.2983	
132 1,3-Dichlorobenzene	146	14.040	14.037	0.003	86	17375	0.3000	0.3114	
133 4-Isopropyltoluene	119	14.074	14.072	0.002	97	42337	0.3000	0.2853	
134 1,4-Dichlorobenzene	146	14.127	14.142	-0.015	81	25137	0.3000	0.2916	
137 n-Butylbenzene	91	14.510	14.507	0.003	98	49540	0.3000	0.3179	
138 1,2-Dichlorobenzene	146	14.527	14.542	-0.015	95	16946	0.3000	0.2893	
139 1,2-Dibromo-3-Chloropropan	157	15.293	15.326	-0.033	68	1451	0.3000	0.2654	
144 1,2,3-Trichlorobenzene	180	16.529	16.074	0.455	45	8851	0.3000	0.2284	a
142 Hexachlorobutadiene	225	16.233	16.231	0.002	94	11646	0.3000	0.2840	
143 Naphthalene	128	16.303	16.301	0.002	92	13238	0.3000	0.2957	
141 1,2,4-Trichlorobenzene	180	16.077	16.527	-0.450	52	10076	0.3000	0.3192	a
S 151 1,2-Dichloroethene, Total	96				0		0.6000	0.6143	
S 145 Trihalomethanes, Total	1				0		1.20	1.10	
S 146 Xylenes, Total (URS)	1				0		0.6000	0.5273	
S 147 Total BTEX	1				0			1.39	
S 148 1,3-Dichloropropene, Total	1				0		0.6000	0.2725	
S 149 1,2-Dichloroethene, Total	1				0		0.6000	0.6143	
S 150 Xylenes, Total	106				0		0.6000	0.5273	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 0.15	Units: uL
MV-Gas/Ket A_00033	Amount Added: 0.15	Units: uL
MV-2cleve+AVA_00009	Amount Added: 0.15	Units: uL

Report Date: 02-Jun-2015 08:03:28

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2949.D
 Injection Date: 28-May-2015 00:18:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H

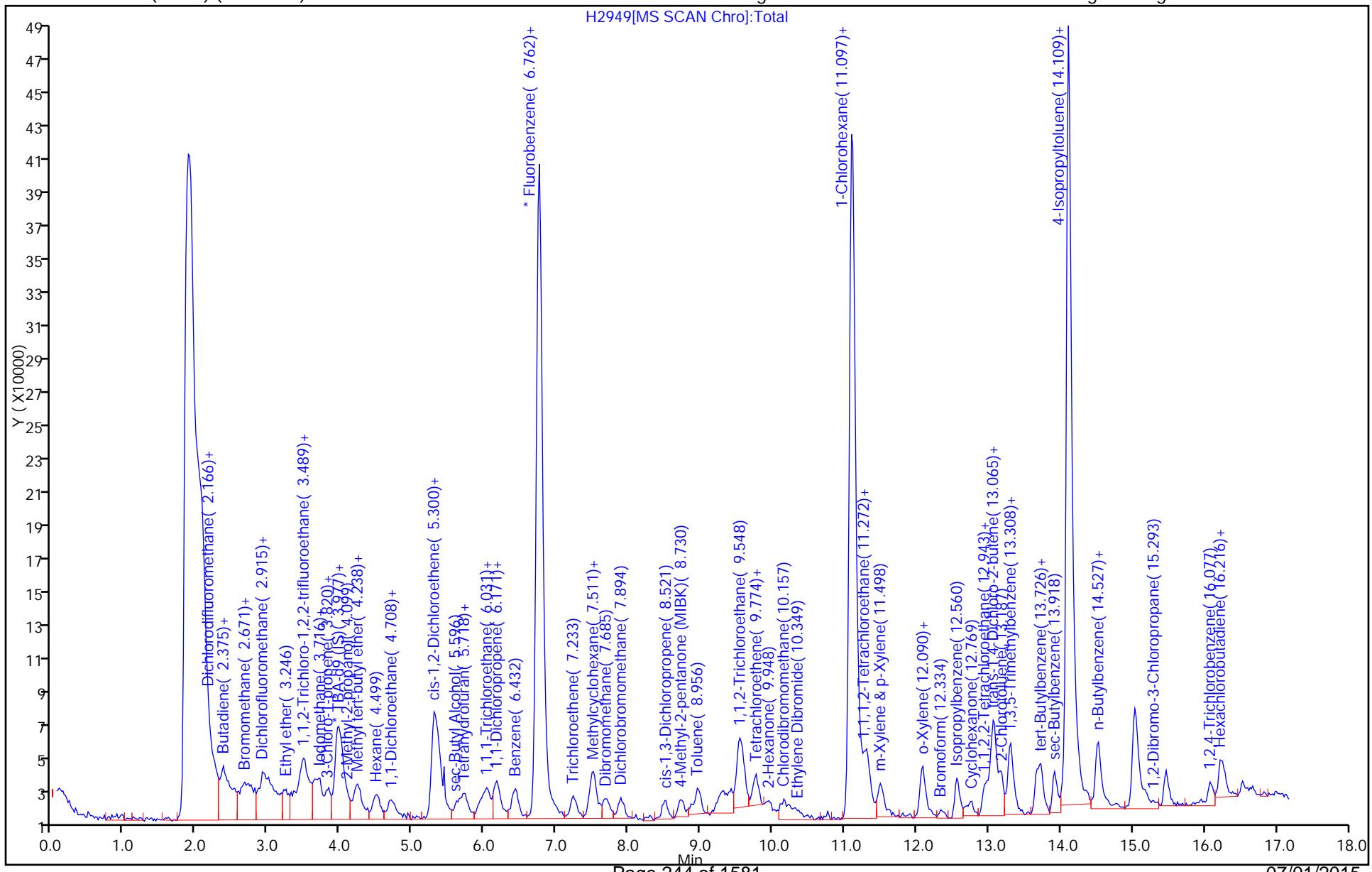
Operator ID: BERGERB
Worklist Smp#: 9

Dil. Factor: 1.0000

Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 3

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

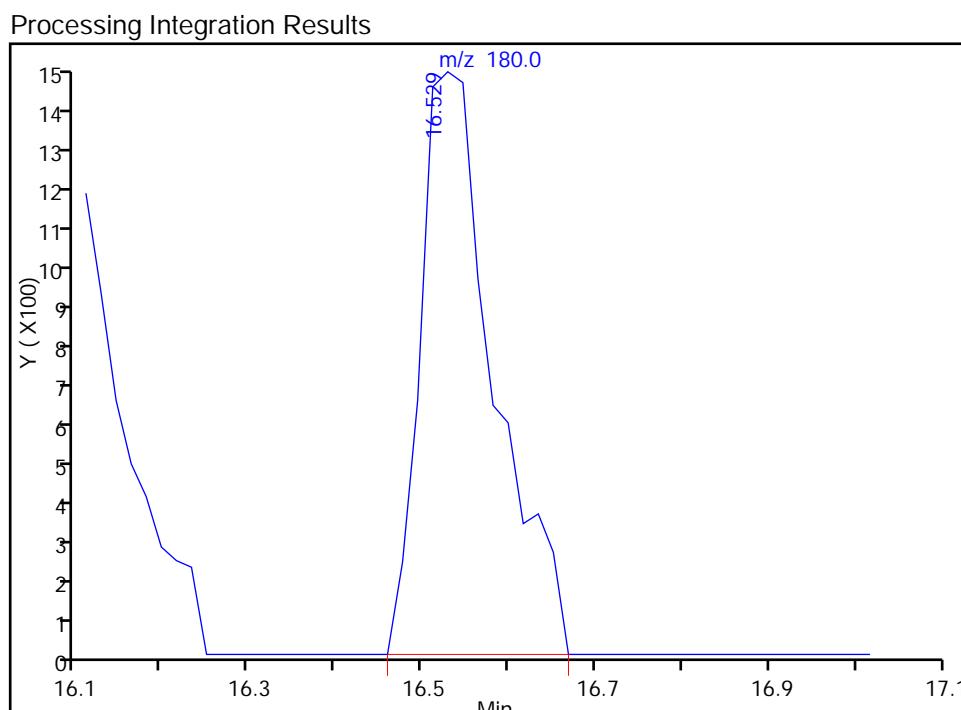


TestAmerica Denver

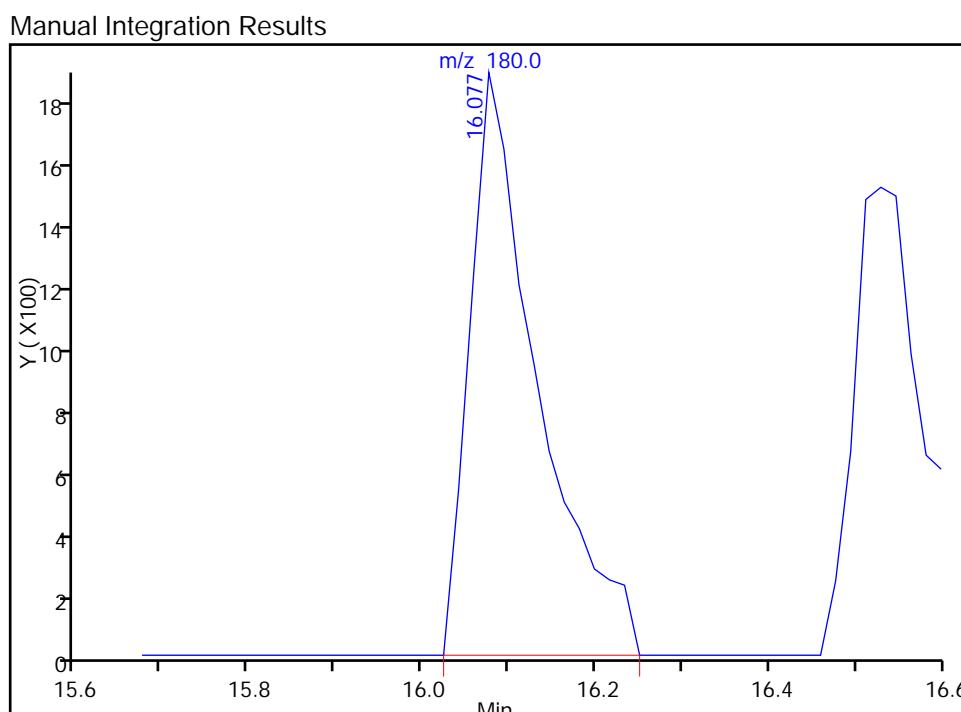
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 Injection Date: 28-May-2015 00:18:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 3 Worklist Smp#: 9
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

RT: 16.53
 Area: 8851
 Amount: 0.285656
 Amount Units: ug/l



RT: 16.08
 Area: 10076
 Amount: 0.319183
 Amount Units: ug/l



Reviewer: moanm, 02-Jun-2015 08:03:27

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

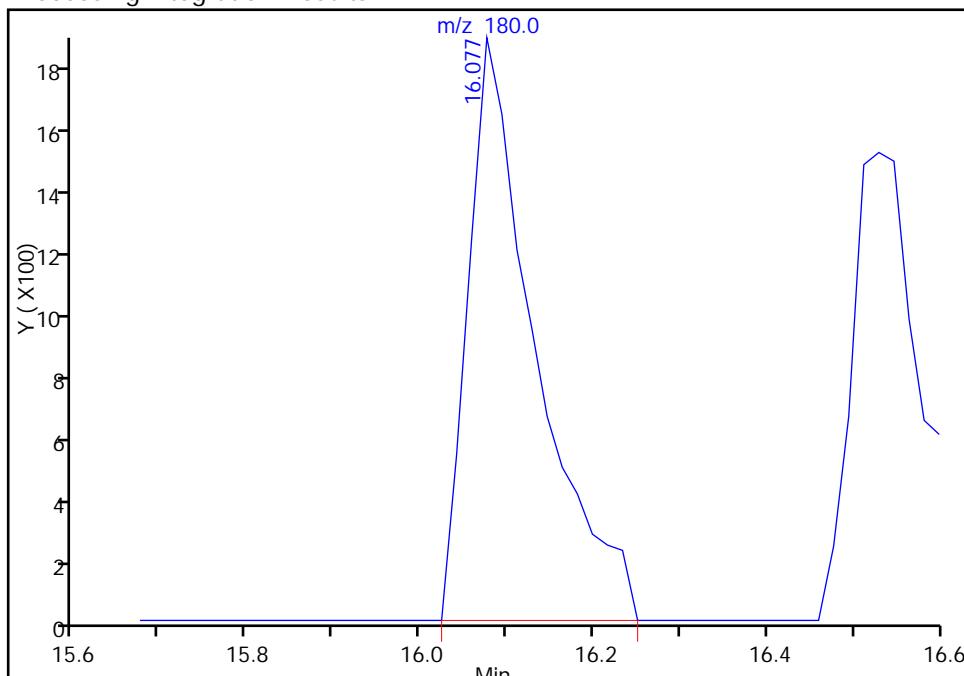
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2949.D
 Injection Date: 28-May-2015 00:18:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 3 Worklist Smp#: 9
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

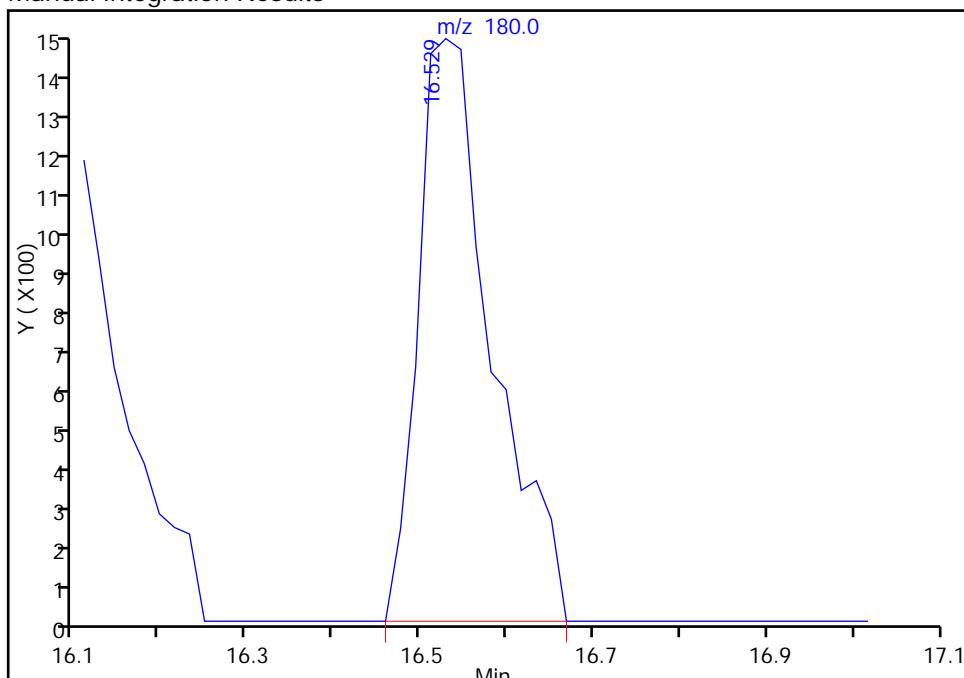
RT: 16.08
 Area: 10076
 Amount: 0.256125
 Amount Units: ug/l

Processing Integration Results



RT: 16.53
 Area: 8851
 Amount: 0.228373
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:03:27

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2950.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 28-May-2015 00:40:30 ALS Bottle#: 4 Worklist Smp#: 10
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:03:43 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: wickhamt

Date: 28-May-2015 06:21:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.993	3.974	0.019	97	193113	250.0	250.0	
* 2 Fluorobenzene	96	6.761	6.759	0.002	97	1059430	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.096	11.094	0.002	93	237965	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.108	14.106	0.002	98	377864	12.5	12.5	
28 Dichlorodifluoromethane	85	2.148	2.164	-0.016	98	42175	1.00	0.9145	
30 Chloromethane	50	2.252	2.269	-0.017	99	30623	1.00	0.9283	M
31 Butadiene	54	2.374	2.373	0.001	0	23161	NC	NC	
32 Vinyl chloride	62	2.391	2.390	0.001	89	29166	1.00	0.9040	
35 Bromomethane	94	2.670	2.669	0.001	90	27242	1.00	1.02	
36 Chloroethane	64	2.757	2.756	0.001	97	19936	1.00	1.02	
37 Dichlorofluoromethane	67	2.931	2.930	0.001	98	65058	1.00	0.9145	
38 Trichlorofluoromethane	101	2.983	2.982	0.001	98	56652	1.00	0.8902	
40 Ethyl ether	59	3.227	3.226	0.001	94	17097	1.00	1.02	
44 Acrolein	56	3.366	3.365	0.001	94	12221	10.0	10.6	
45 1,1-Dichloroethene	96	3.471	3.470	0.001	94	33271	1.00	1.05	
46 1,1,2-Trichloro-1,2,2-trif	151	3.488	3.487	0.001	95	44325	1.00	1.03	
47 Acetone	43	3.505	3.505	0.000	46	16671	4.00	5.06	
48 Iodomethane	142	3.645	3.644	0.001	98	73821	1.00	1.04	
50 Carbon disulfide	76	3.732	3.731	0.001	95	123216	1.00	1.01	
52 3-Chloro-1-propene	41	3.819	3.818	0.001	84	77645	1.00	1.06	
53 Methyl acetate	43	3.819	3.818	0.001	73	59188	5.00	5.55	
54 Methylene Chloride	84	3.941	3.957	-0.016	98	39793	1.00	1.01	
55 2-Methyl-2-propanol	59	4.080	4.062	0.018	95	10757	10.0	7.40	
57 Acrylonitrile	53	4.202	4.201	0.001	54	28348	10.0	10.3	
58 trans-1,2-Dichloroethene	96	4.237	4.236	0.001	94	35154	1.00	0.9876	
56 Methyl tert-butyl ether	73	4.237	4.236	0.001	84	62101	1.00	1.03	
59 Hexane	57	4.498	4.514	-0.016	95	64190	1.00	1.01	
60 1,1-Dichloroethane	63	4.689	4.688	0.001	96	79883	1.00	1.06	
61 Vinyl acetate	43	4.724	4.723	0.001	96	84948	2.00	1.83	
65 cis-1,2-Dichloroethene	96	5.351	5.367	-0.016	87	37013	1.00	1.03	
67 2-Butanone (MEK)	43	5.368	5.367	0.001	45	24233	4.00	3.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.368	5.385	-0.017	76	111289	1.00	1.02	
71 sec-Butyl Alcohol	45	5.595	5.576	0.019	97	44351	30.0	32.1	
73 Chlorobromomethane	128	5.647	5.663	-0.016	90	15065	1.00	0.9571	
74 Tetrahydrofuran	42	5.716	5.716	0.000	40	9425	2.00	2.15	
75 Chloroform	83	5.716	5.733	-0.017	95	75009	1.00	1.07	
76 1,1,1-Trichloroethane	97	5.978	5.977	0.001	96	69076	1.00	1.03	
77 Cyclohexane	56	6.047	6.046	0.001	92	74464	1.00	1.01	
78 1,1-Dichloropropene	75	6.152	6.168	-0.016	90	61407	1.00	1.02	
79 Carbon tetrachloride	117	6.187	6.186	0.001	96	63160	1.00	1.01	
80 Isobutyl alcohol	41	6.291	6.290	0.001	90	13096	25.0	27.0	
81 Benzene	78	6.413	6.429	-0.016	97	109532	1.00	0.9869	
82 1,2-Dichloroethane	62	6.448	6.447	0.001	94	34787	1.00	1.04	
84 n-Heptane	43	6.709	6.725	-0.016	97	102379	1.00	1.04	
86 Trichloroethene	95	7.231	7.230	0.001	97	44827	1.00	0.99	
88 2-Pentanone	43	7.475	7.474	0.001	95	65366	4.00	3.88	
89 Methylcyclohexane	55	7.492	7.491	0.001	92	69997	1.00	1.06	
90 1,2-Dichloropropane	63	7.527	7.526	0.001	95	47827	1.00	1.08	
92 Dibromomethane	93	7.684	7.700	-0.016	94	22545	1.00	1.02	
93 1,4-Dioxane	88	7.736	7.718	0.018	30	1190	20.0	20.9	
94 Dichlorobromomethane	83	7.893	7.892	0.001	98	64456	1.00	1.00	
96 2-Chloroethyl vinyl ether	63	8.293	8.292	0.001	82	8401	1.00	1.06	
97 cis-1,3-Dichloropropene	75	8.502	8.501	0.001	91	55629	1.00	0.99	
98 4-Methyl-2-pentanone (MIBK)	43	8.728	8.710	0.018	98	72563	4.00	3.27	
99 Toluene	91	8.972	8.971	0.001	97	132622	1.00	1.04	
100 trans-1,3-Dichloropropene	75	9.285	9.285	0.000	94	41101	1.00	1.01	
101 Ethyl methacrylate	69	9.407	9.406	0.001	95	38403	1.00	1.12	
102 1,1,2-Trichloroethane	97	9.547	9.546	0.001	54	28973	1.00	1.14	
103 Tetrachloroethene	164	9.756	9.772	-0.016	94	39068	1.00	1.01	
104 1,3-Dichloropropane	76	9.790	9.789	0.001	95	47124	1.00	1.08	
105 2-Hexanone	43	9.912	9.929	-0.017	96	43268	4.00	3.23	
108 Chlorodibromomethane	129	10.139	10.155	-0.016	90	43268	1.00	1.02	
109 Ethylene Dibromide	107	10.330	10.329	0.001	99	29215	1.00	0.9759	
110 1-Chlorohexane	91	11.113	11.113	0.000	81	66824	1.00	1.02	
111 Chlorobenzene	112	11.148	11.147	0.001	88	85583	1.00	1.00	
112 1,1,2-Tetrachloroethane	131	11.288	11.287	0.001	81	41387	1.00	1.00	
113 Ethylbenzene	106	11.322	11.322	0.000	99	43467	1.00	1.00	
114 m-Xylene & p-Xylene	106	11.496	11.496	0.000	97	62391	1.00	1.05	
115 o-Xylene	106	12.071	12.070	0.001	98	51986	1.00	1.00	
116 Styrene	104	12.088	12.088	0.000	94	88179	1.00	1.05	
117 Bromoform	173	12.350	12.349	0.001	94	21881	1.00	0.9548	
118 Isopropylbenzene	105	12.558	12.558	0.000	97	171044	1.00	1.06	
120 Cyclohexanone	55	12.680	12.697	-0.017	94	15703	40.0	31.4	
122 Bromobenzene	156	12.941	12.941	0.000	92	38258	1.00	1.02	
121 1,1,2,2-Tetrachloroethane	83	12.959	12.958	0.001	71	38437	1.00	1.14	
123 1,2,3-Trichloropropane	110	13.011	12.993	0.018	79	8533	1.00	1.08	
124 trans-1,4-Dichloro-2-butene	53	13.029	13.028	0.000	63	10962	1.00	1.24	
125 N-Propylbenzene	120	13.081	13.080	0.001	99	41134	1.00	1.04	
126 2-Chlorotoluene	126	13.168	13.184	-0.016	97	32135	1.00	1.05	
127 1,3,5-Trimethylbenzene	105	13.290	13.289	0.001	94	124917	1.00	1.02	
128 4-Chlorotoluene	126	13.307	13.306	0.001	98	41938	1.00	1.06	
129 tert-Butylbenzene	119	13.673	13.672	0.001	95	139500	1.00	1.05	
130 1,2,4-Trimethylbenzene	105	13.725	13.724	0.001	96	121648	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.916	13.916	0.000	95	35553	1.00	1.01	
132 1,3-Dichlorobenzene	146	14.038	14.037	0.001	97	59259	1.00	1.04	
133 4-Isopropyltoluene	119	14.073	14.072	0.001	98	156306	1.00	1.04	
134 1,4-Dichlorobenzene	146	14.125	14.142	-0.017	92	90470	1.00	1.03	
137 n-Butylbenzene	91	14.508	14.507	0.001	99	162753	1.00	1.03	
138 1,2-Dichlorobenzene	146	14.526	14.542	-0.016	95	60837	1.00	1.02	
139 1,2-Dibromo-3-Chloropropan	157	15.327	15.326	0.001	74	5677	1.00	1.02	
144 1,2,3-Trichlorobenzene	180	16.528	16.074	0.454	84	32643	1.00	0.8534	a
142 Hexachlorobutadiene	225	16.232	16.231	0.001	97	43213	1.00	1.04	
143 Naphthalene	128	16.302	16.301	0.001	97	45982	1.00	1.01	
141 1,2,4-Trichlorobenzene	180	16.075	16.527	-0.452	85	40657	1.00	1.22	a
S 151 1,2-Dichloroethene, Total	96				0		2.00	2.02	
S 145 Trihalomethanes, Total	1				0		4.00	4.04	
S 146 Xylenes, Total (URS)	1				0		2.00	2.06	
S 147 Total BTEX	1				0			5.09	
S 148 1,3-Dichloropropene, Total	1				0		2.00	2.00	
S 149 1,2-Dichloroethene, Total	1				0		2.00	2.02	
S 150 Xylenes, Total	106				0		2.00	2.06	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

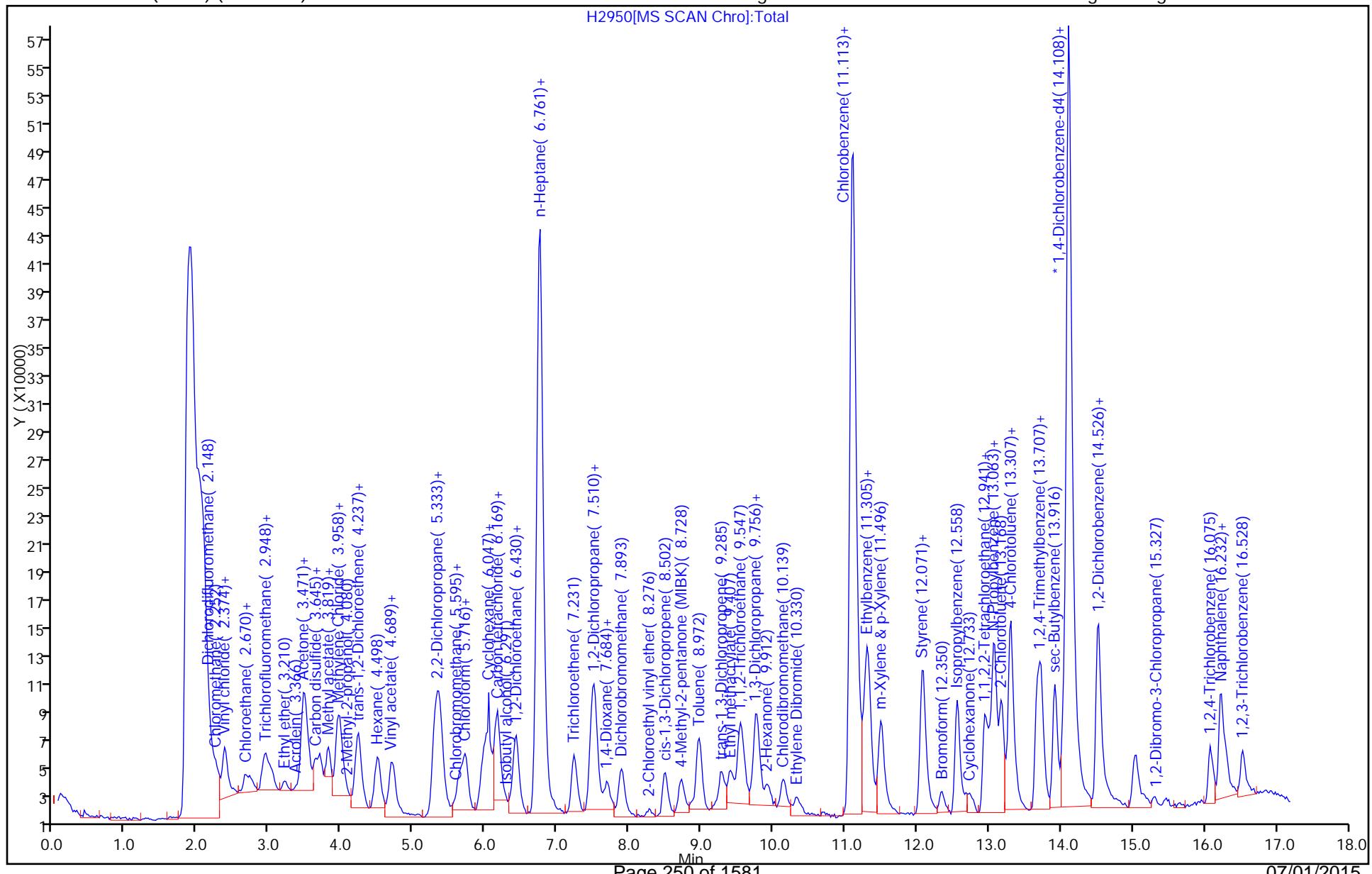
M - Manually Integrated

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 0.50	Units: uL
MV-Gas/Ket A_00033	Amount Added: 0.50	Units: uL
MV-2cleve+AVA_00009	Amount Added: 0.50	Units: uL

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2950.D
 Injection Date: 28-May-2015 00:40:30 Instrument ID: VMS_H
 Lims ID: ic Operator ID: BERGERB
 Client ID:
 Purge Vol: 20.000 mL Worklist Smp#: 10
 Method: AQ_VMSH_8260 Dil. Factor: 1.0000 ALS Bottle#: 4
 Column: DB-624 (75.53) (0.53 mm) Limit Group: MSV - 8260B Water and Solid
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



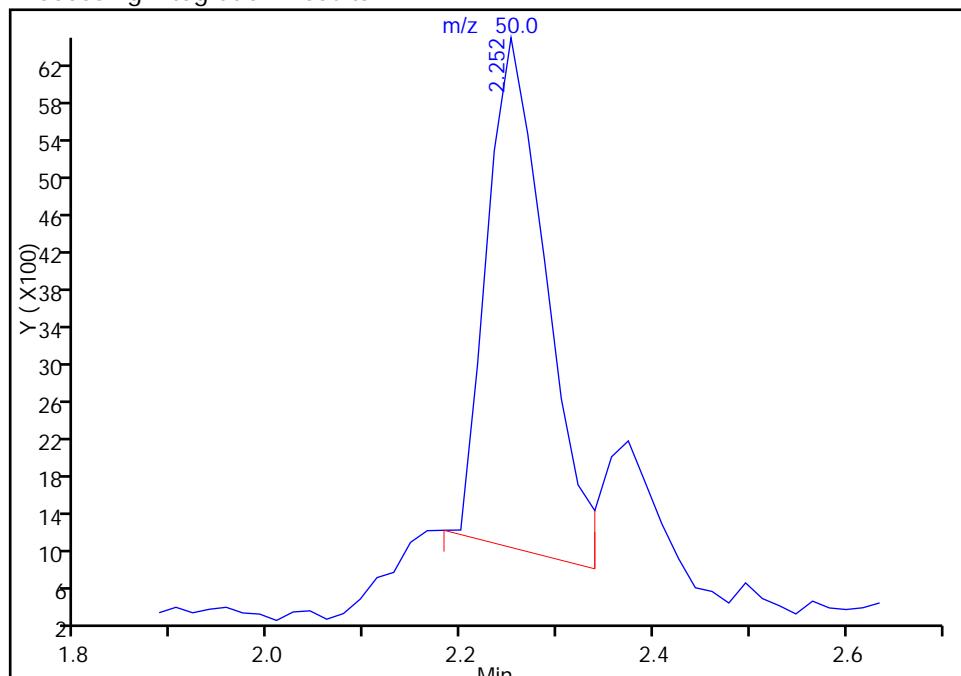
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2950.D
 Injection Date: 28-May-2015 00:40:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 4 Worklist Smp#: 10
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

30 Chloromethane, CAS: 74-87-3

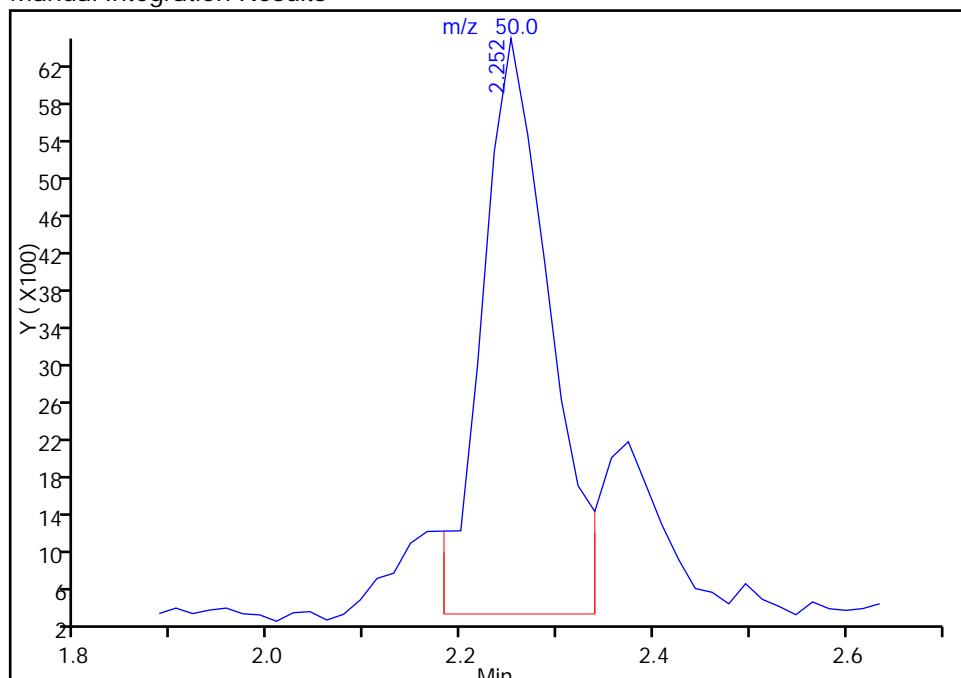
RT: 2.25
 Area: 23488
 Amount: 0.764324
 Amount Units: ug/l

Processing Integration Results



RT: 2.25
 Area: 30623
 Amount: 0.928269
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:21:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline

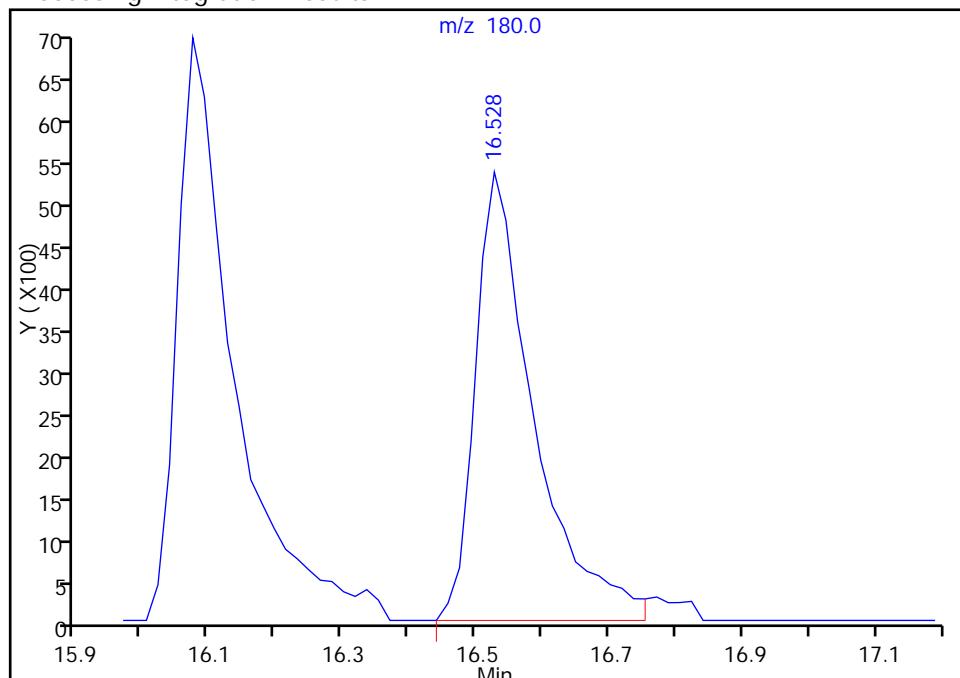
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2950.D
 Injection Date: 28-May-2015 00:40:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 4 Worklist Smp#: 10
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

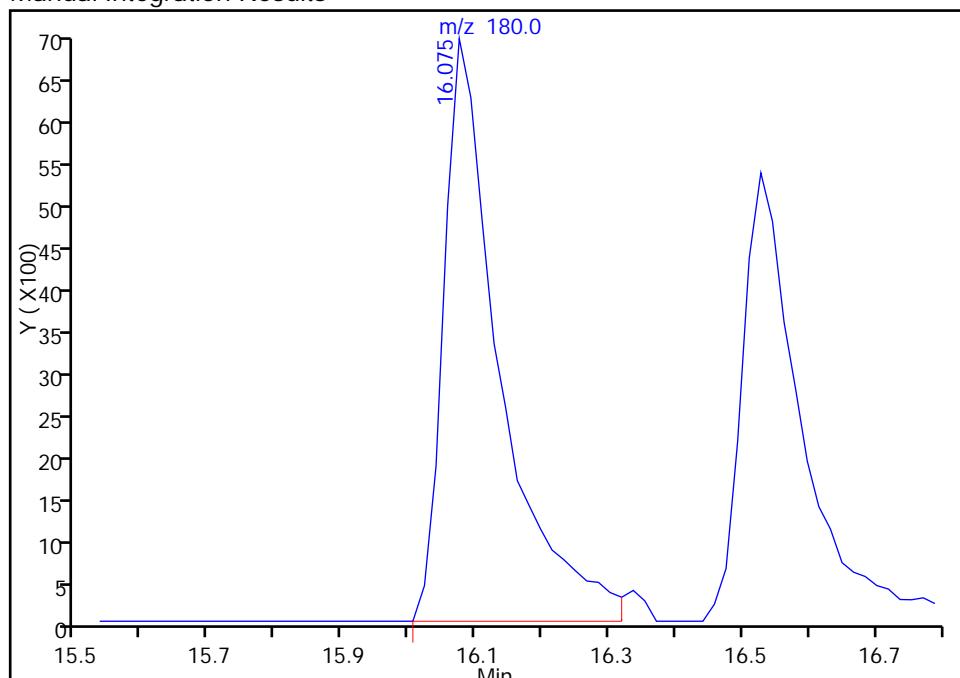
RT: 16.53
 Area: 32643
 Amount: 1.017307
 Amount Units: ug/l

Processing Integration Results



RT: 16.08
 Area: 40657
 Amount: 1.223410
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:03:43

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

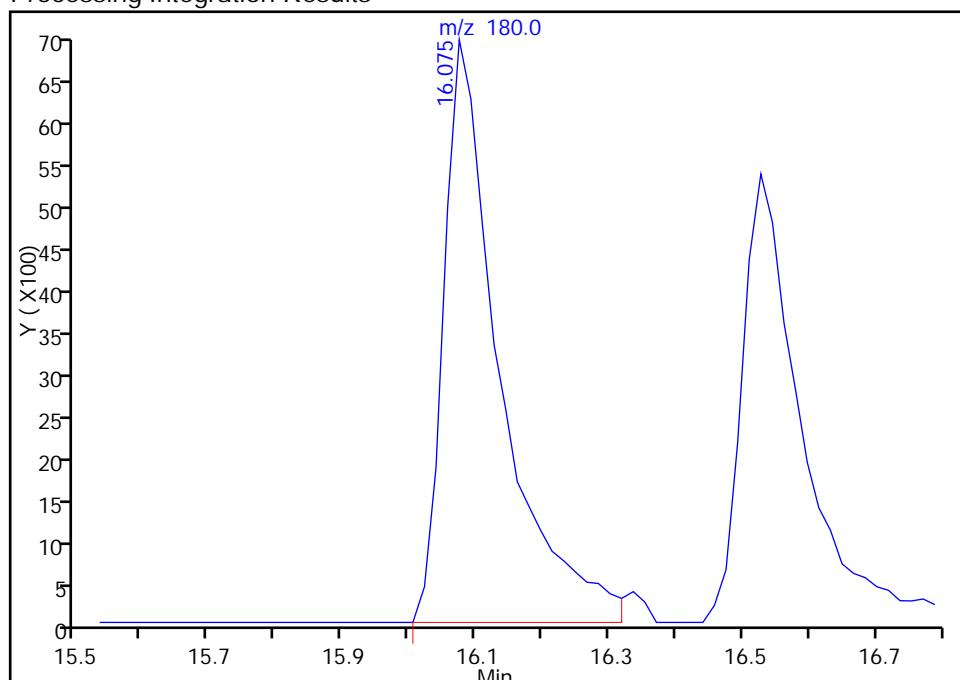
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2950.D
 Injection Date: 28-May-2015 00:40:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 4 Worklist Smp#: 10
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

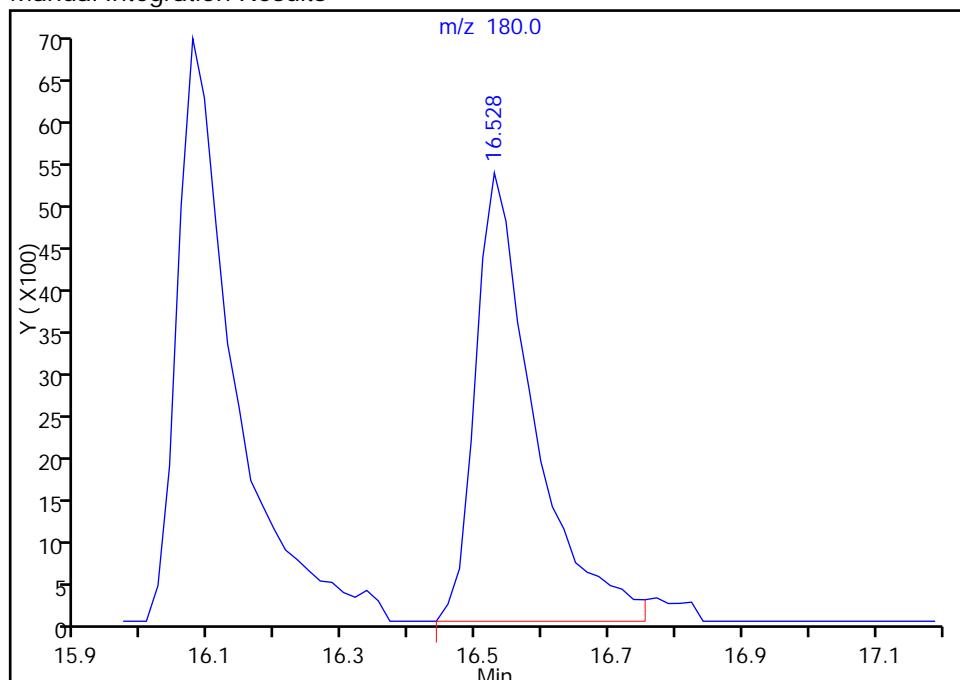
RT: 16.08
 Area: 40657
 Amount: 1.032043
 Amount Units: ug/l

Processing Integration Results



RT: 16.53
 Area: 32643
 Amount: 0.853416
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:03:43

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2951.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 28-May-2015 01:03:30 ALS Bottle#: 5 Worklist Smp#: 11
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:04:02 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: wickhamt Date: 28-May-2015 06:22:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.971	3.974	-0.003	97	188279	250.0	250.0	
* 2 Fluorobenzene	96	6.756	6.759	-0.003	96	1027041	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.109	11.094	0.015	94	231298	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.106	0.014	97	367583	12.5	12.5	
28 Dichlorodifluoromethane	85	2.143	2.164	-0.021	97	61856	2.00	1.33	
30 Chloromethane	50	2.247	2.269	-0.022	98	53286	2.00	1.67	M
31 Butadiene	54	2.369	2.373	-0.004	0	36913	NC	NC	
32 Vinyl chloride	62	2.386	2.390	-0.004	85	47784	2.00	1.53	
35 Bromomethane	94	2.665	2.669	-0.004	91	43358	2.00	1.67	
36 Chloroethane	64	2.735	2.756	-0.021	100	31142	2.00	1.64	
37 Dichlorofluoromethane	67	2.926	2.930	-0.004	97	111136	2.00	1.61	
38 Trichlorofluoromethane	101	2.996	2.982	0.014	99	89150	2.00	1.45	
40 Ethyl ether	59	3.222	3.226	-0.004	95	32923	2.00	2.02	
44 Acrolein	56	3.361	3.365	-0.004	98	21672	20.0	19.3	
45 1,1-Dichloroethene	96	3.466	3.470	-0.004	94	58222	2.00	1.90	
46 1,1,2-Trichloro-1,2,2-trif	151	3.483	3.487	-0.004	97	79903	2.00	1.91	
47 Acetone	43	3.501	3.505	-0.004	39	25083	8.00	7.85	
48 Iodomethane	142	3.640	3.644	-0.004	100	131594	2.00	1.91	
50 Carbon disulfide	76	3.709	3.731	-0.022	96	214216	2.00	1.81	
52 3-Chloro-1-propene	41	3.814	3.818	-0.004	85	137857	2.00	1.94	
53 Methyl acetate	43	3.814	3.818	-0.004	78	101327	10.0	9.79	
54 Methylene Chloride	84	3.936	3.957	-0.021	97	62909	2.00	1.95	
55 2-Methyl-2-propanol	59	4.075	4.062	0.013	91	25764	20.0	24.8	
57 Acrylonitrile	53	4.197	4.201	-0.004	97	53920	20.0	20.1	
58 trans-1,2-Dichloroethene	96	4.232	4.236	-0.004	94	67262	2.00	1.95	
56 Methyl tert-butyl ether	73	4.232	4.236	-0.004	91	113032	2.00	1.93	
59 Hexane	57	4.493	4.514	-0.021	94	113407	2.00	1.83	
60 1,1-Dichloroethane	63	4.684	4.688	-0.004	96	136484	2.00	1.87	
61 Vinyl acetate	43	4.719	4.723	-0.004	96	169021	4.00	3.75	
65 cis-1,2-Dichloroethene	96	5.346	5.367	-0.021	88	67321	2.00	1.94	
67 2-Butanone (MEK)	43	5.363	5.367	-0.004	46	37612	8.00	6.38	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.363	5.385	-0.022	92	161477	2.00	1.91	
71 sec-Butyl Alcohol	45	5.572	5.576	-0.004	96	81308	60.0	60.3	
73 Chlorobromomethane	128	5.642	5.663	-0.021	90	30589	2.00	2.00	
74 Tetrahydrofuran	42	5.712	5.716	-0.004	41	16390	4.00	3.86	
75 Chloroform	83	5.729	5.733	-0.004	96	133676	2.00	1.96	
76 1,1,1-Trichloroethane	97	5.973	5.977	-0.004	97	122948	2.00	1.89	
77 Cyclohexane	56	6.042	6.046	-0.004	92	137225	2.00	1.91	
78 1,1-Dichloropropene	75	6.147	6.168	-0.021	92	109356	2.00	1.88	
79 Carbon tetrachloride	117	6.182	6.186	-0.004	97	114248	2.00	1.89	
80 Isobutyl alcohol	41	6.304	6.290	0.014	93	22070	50.0	46.7	
81 Benzene	78	6.408	6.429	-0.021	97	210215	2.00	1.95	
82 1,2-Dichloroethane	62	6.443	6.447	-0.004	96	65169	2.00	2.00	
84 n-Heptane	43	6.721	6.725	-0.004	97	176712	2.00	1.85	
86 Trichloroethene	95	7.226	7.230	-0.004	97	82244	2.00	1.88	
88 2-Pentanone	43	7.470	7.474	-0.004	96	124028	8.00	7.59	
89 Methylcyclohexane	55	7.487	7.491	-0.004	90	121641	2.00	1.90	
90 1,2-Dichloropropane	63	7.522	7.526	-0.004	96	88743	2.00	2.06	
92 Dibromomethane	93	7.696	7.700	-0.004	91	42931	2.00	2.00	
93 1,4-Dioxane	88	7.714	7.718	-0.004	29	3158	40.0	36.4	
94 Dichlorobromomethane	83	7.888	7.892	-0.004	98	126497	2.00	2.02	
96 2-Chloroethyl vinyl ether	63	8.288	8.292	-0.004	85	12060	2.00	1.57	
97 cis-1,3-Dichloropropene	75	8.497	8.501	-0.004	91	107388	2.00	1.97	
98 4-Methyl-2-pentanone (MIBK)	43	8.723	8.710	0.013	97	125802	8.00	5.81	
99 Toluene	91	8.967	8.971	-0.004	98	237075	2.00	1.92	
100 trans-1,3-Dichloropropene	75	9.281	9.285	-0.004	97	78291	2.00	1.99	
101 Ethyl methacrylate	69	9.420	9.406	0.014	96	70056	2.00	2.09	
102 1,1,2-Trichloroethane	97	9.559	9.546	0.013	66	51927	2.00	2.10	
103 Tetrachloroethene	164	9.768	9.772	-0.004	96	71310	2.00	1.90	
104 1,3-Dichloropropane	76	9.785	9.789	-0.004	95	87035	2.00	2.05	
105 2-Hexanone	43	9.925	9.929	-0.004	98	85245	8.00	6.00	
108 Chlorodibromomethane	129	10.151	10.155	-0.004	91	82411	2.00	2.00	
109 Ethylene Dibromide	107	10.325	10.329	-0.004	97	58280	2.00	2.00	
110 1-Chlorohexane	91	11.109	11.113	-0.004	89	118927	2.00	1.87	
111 Chlorobenzene	112	11.143	11.147	-0.004	89	161425	2.00	1.95	
112 1,1,2-Tetrachloroethane	131	11.283	11.287	-0.004	83	77661	2.00	1.94	
113 Ethylbenzene	106	11.317	11.322	-0.005	99	82557	2.00	1.95	
114 m-Xylene & p-Xylene	106	11.492	11.496	-0.004	97	102405	2.00	1.78	
115 o-Xylene	106	12.066	12.070	-0.004	99	100515	2.00	1.99	
116 Styrene	104	12.083	12.088	-0.005	93	160271	2.00	1.97	
117 Bromoform	173	12.345	12.349	-0.004	93	43536	2.00	1.95	
118 Isopropylbenzene	105	12.554	12.558	-0.004	97	305501	2.00	1.94	
120 Cyclohexanone	55	12.693	12.697	-0.004	96	29957	80.0	60.0	
122 Bromobenzene	156	12.937	12.941	-0.004	91	73134	2.00	2.01	
121 1,1,2,2-Tetrachloroethane	83	12.954	12.958	-0.004	91	68821	2.00	2.10	
123 1,2,3-Trichloropropane	110	13.006	12.993	0.013	78	16148	2.00	2.11	
124 trans-1,4-Dichloro-2-butene	53	13.006	13.028	-0.022	67	18311	2.00	2.13	
125 N-Propylbenzene	120	13.076	13.080	-0.004	99	76813	2.00	1.99	
126 2-Chlorotoluene	126	13.180	13.184	-0.004	96	60448	2.00	2.02	
127 1,3,5-Trimethylbenzene	105	13.302	13.289	0.013	94	234990	2.00	1.97	
128 4-Chlorotoluene	126	13.320	13.306	0.014	97	78238	2.00	2.03	
129 tert-Butylbenzene	119	13.668	13.672	-0.004	95	250654	2.00	1.94	
130 1,2,4-Trimethylbenzene	105	13.720	13.724	-0.004	95	221512	2.00	1.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.911	13.916	-0.005	95	69410	2.00	2.03	
132 1,3-Dichlorobenzene	146	14.033	14.037	-0.004	94	108495	2.00	1.97	
133 4-Isopropyltoluene	119	14.086	14.072	0.014	98	292735	2.00	2.00	
134 1,4-Dichlorobenzene	146	14.138	14.142	-0.004	90	173354	2.00	2.03	
137 n-Butylbenzene	91	14.503	14.507	-0.004	99	295629	2.00	1.92	
138 1,2-Dichlorobenzene	146	14.538	14.542	-0.004	95	117567	2.00	2.03	
139 1,2-Dibromo-3-Chloropropan	157	15.322	15.326	-0.004	82	11040	2.00	2.04	
144 1,2,3-Trichlorobenzene	180	16.523	16.074	0.449	89	56420	2.00	1.56	a
142 Hexachlorobutadiene	225	16.227	16.231	-0.004	96	81678	2.00	2.01	
143 Naphthalene	128	16.297	16.301	-0.004	97	88140	2.00	1.99	
141 1,2,4-Trichlorobenzene	180	16.070	16.527	-0.457	90	79388	2.00	2.34	a
S 151 1,2-Dichloroethene, Total	96				0		4.00	3.89	
S 145 Trihalomethanes, Total	1				0		8.00	7.94	
S 146 Xylenes, Total (URS)	1				0		4.00	3.77	
S 147 Total BTEX	1				0			9.60	
S 148 1,3-Dichloropropene, Total	1				0		4.00	3.96	
S 149 1,2-Dichloroethene, Total	1				0		4.00	3.89	
S 150 Xylenes, Total	106				0		4.00	3.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 1.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 08:04:02

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2951.D

Injection Date: 28-May-2015 01:03:30

Instrument ID: VMS_H

Lims ID: ic

Operator ID: BERGERB

Client ID:

Worklist Smp#: 11

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

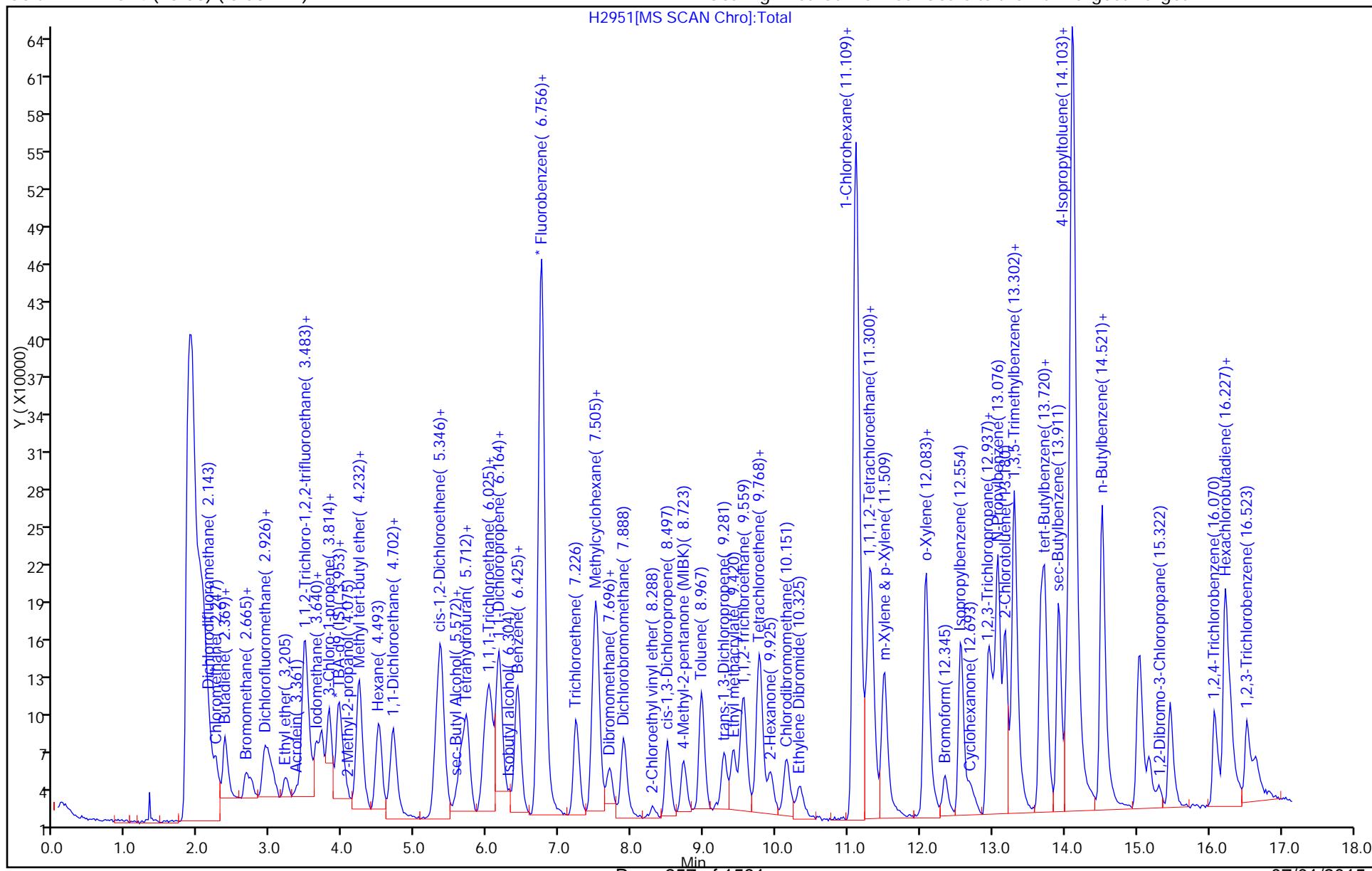
ALS Bottle#: 5

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



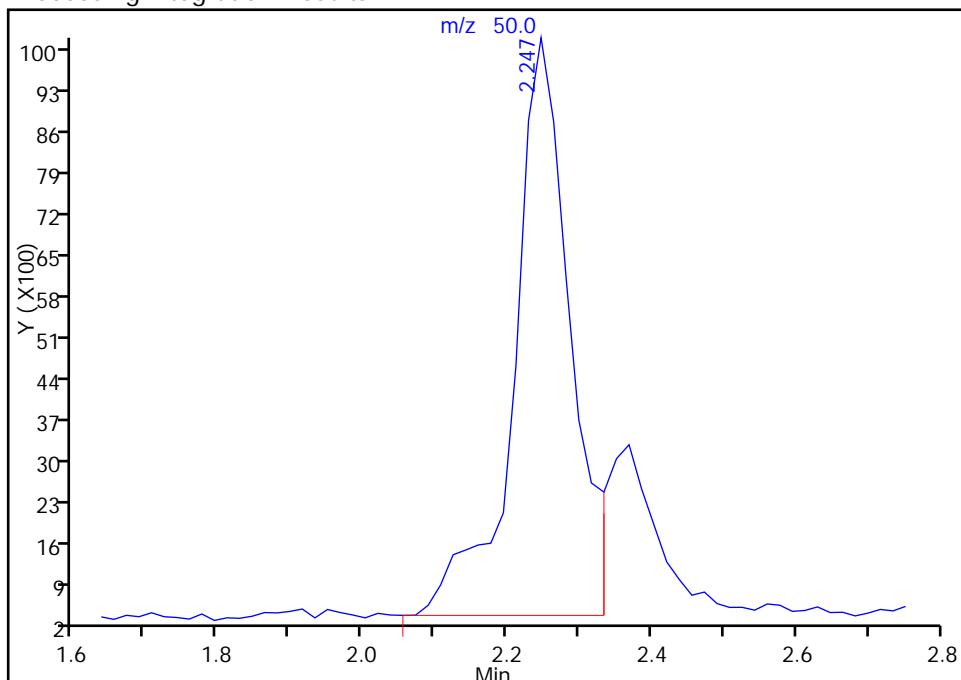
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2951.D
 Injection Date: 28-May-2015 01:03:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 5 Worklist Smp#: 11
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

30 Chloromethane, CAS: 74-87-3

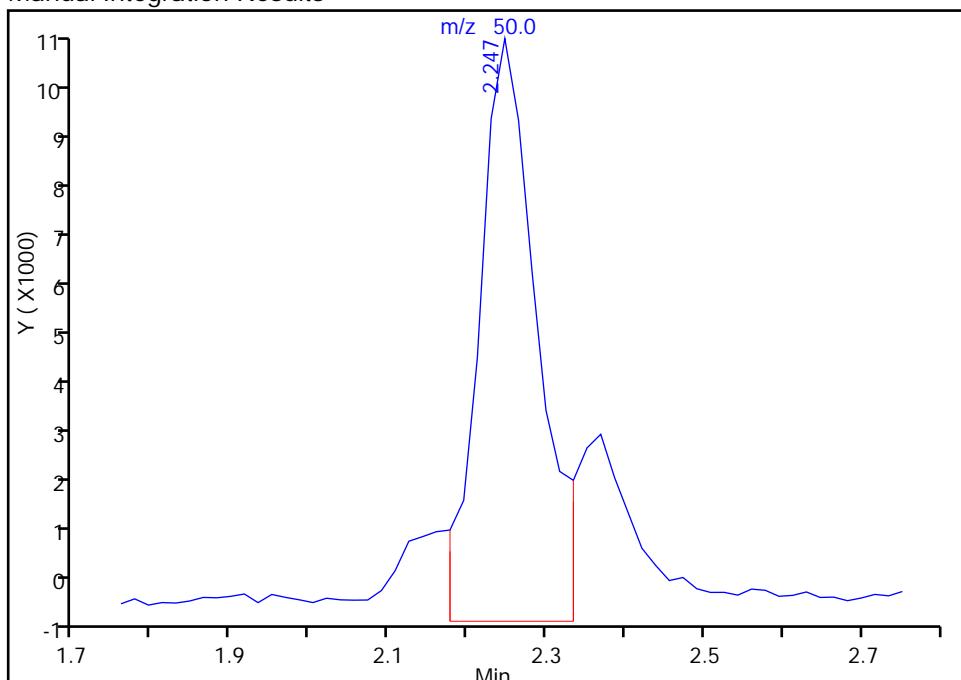
RT: 2.25
 Area: 53646
 Amount: 1.676096
 Amount Units: ug/l

Processing Integration Results



RT: 2.25
 Area: 53286
 Amount: 1.666187
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:22:57

Audit Action: Assigned New Baseline

Audit Reason: Shouldering

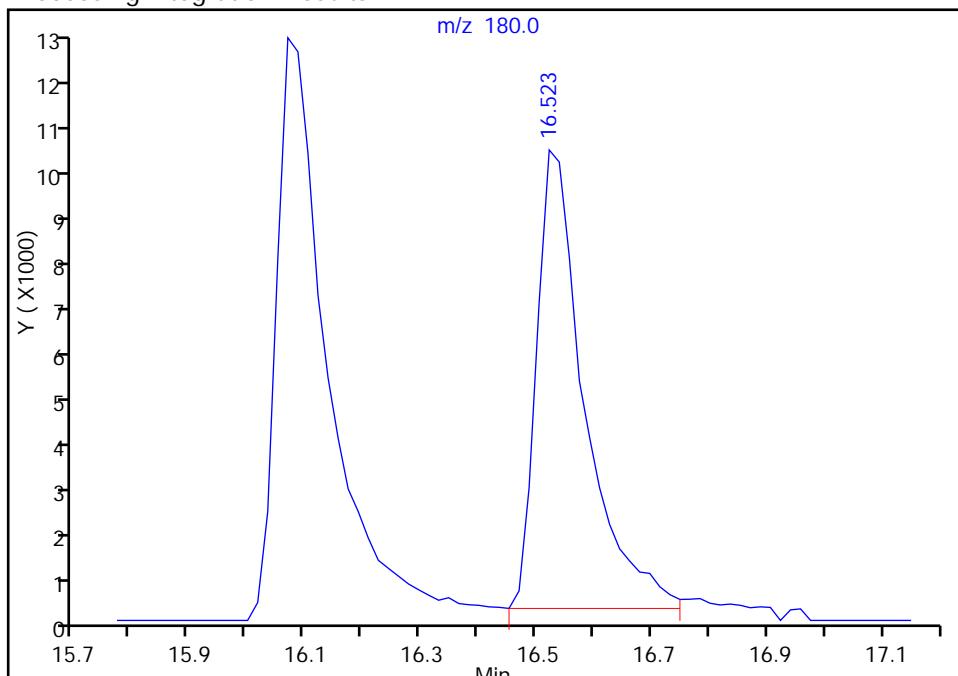
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2951.D
 Injection Date: 28-May-2015 01:03:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 5 Worklist Smp#: 11
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

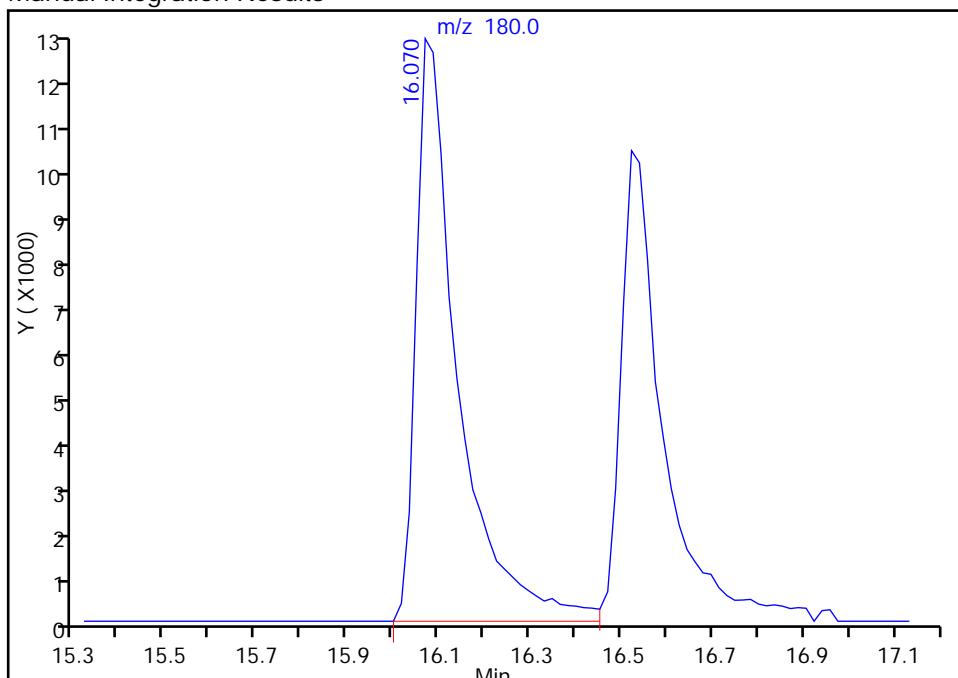
RT: 16.52
 Area: 56420
 Amount: 1.745219
 Amount Units: ug/l

Processing Integration Results



RT: 16.07
 Area: 79388
 Amount: 2.337079
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:02

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

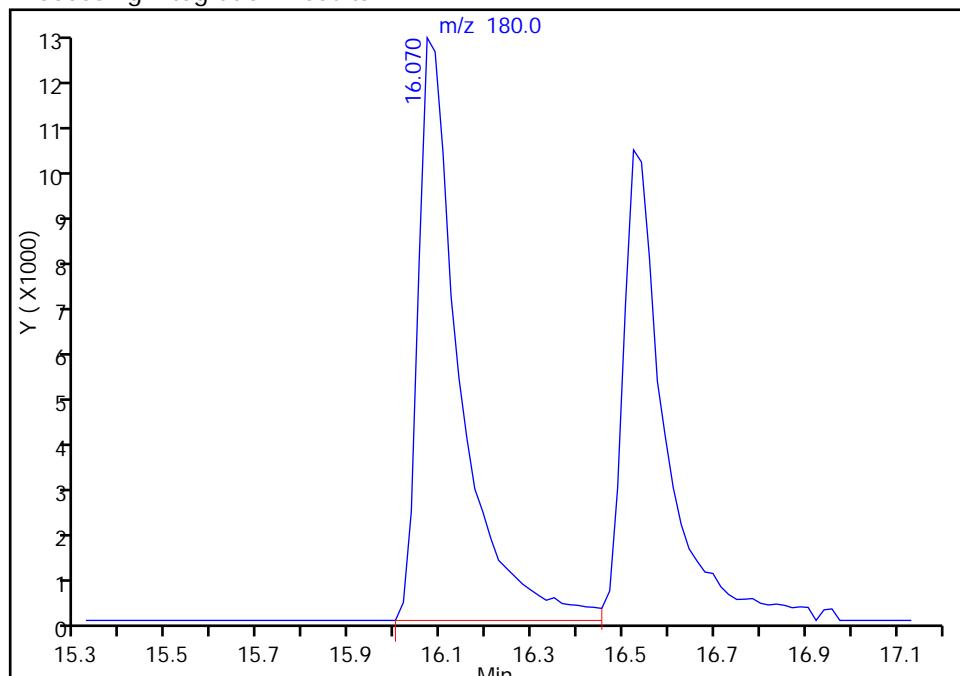
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2951.D
 Injection Date: 28-May-2015 01:03:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 5 Worklist Smp#: 11
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

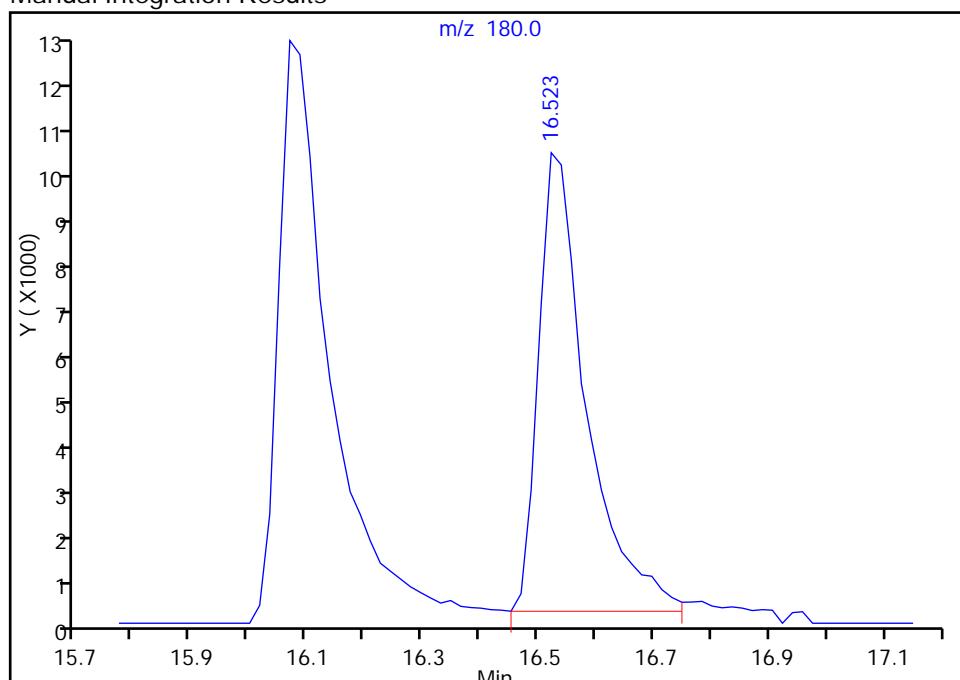
RT: 16.07
 Area: 79388
 Amount: 2.133564
 Amount Units: ug/l

Processing Integration Results



RT: 16.52
 Area: 56420
 Amount: 1.559763
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:02

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2952.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 28-May-2015 01:25:30 ALS Bottle#: 6 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:04:17 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: wickhamt

Date: 28-May-2015 06:24:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.987	3.974	0.013	96	195219	250.0	250.0	
* 2 Fluorobenzene	96	6.755	6.759	-0.004	95	1029988	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.108	11.094	0.014	93	227484	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.106	0.014	97	377031	12.5	12.5	
28 Dichlorodifluoromethane	85	2.159	2.164	-0.005	98	247178	5.00	5.03	
30 Chloromethane	50	2.264	2.269	-0.005	100	162089	5.00	5.05	
31 Butadiene	54	2.368	2.373	-0.005	0	127553	NC	NC	
32 Vinyl chloride	62	2.386	2.390	-0.004	97	159681	5.00	5.09	
35 Bromomethane	94	2.682	2.669	0.013	91	132730	5.00	5.10	
36 Chloroethane	64	2.751	2.756	-0.005	99	103163	5.00	5.41	
37 Dichlorodifluoromethane	67	2.925	2.930	-0.005	99	365019	5.00	5.28	
38 Trichlorodifluoromethane	101	2.978	2.982	-0.004	99	321455	5.00	5.20	
40 Ethyl ether	59	3.221	3.226	-0.005	94	84807	5.00	5.19	
44 Acrolein	56	3.361	3.365	-0.004	99	59073	50.0	52.5	
45 1,1-Dichloroethene	96	3.465	3.470	-0.005	94	159253	5.00	5.18	
46 1,1,2-Trichloro-1,2,2-trif	151	3.500	3.487	0.013	97	219337	5.00	5.23	
47 Acetone	43	3.517	3.505	0.012	41	62422	20.0	19.5	
48 Iodomethane	142	3.639	3.644	-0.005	99	351110	5.00	5.07	
50 Carbon disulfide	76	3.726	3.731	-0.005	99	599818	5.00	5.06	
52 3-Chloro-1-propene	41	3.813	3.818	-0.005	92	363829	5.00	5.10	
53 Methyl acetate	43	3.831	3.818	0.013	98	259179	25.0	25.0	
54 Methylene Chloride	84	3.952	3.957	-0.005	98	146368	5.00	5.15	
55 2-Methyl-2-propanol	59	4.074	4.062	0.012	96	50634	50.0	51.2	
57 Acrylonitrile	53	4.214	4.201	0.013	99	132956	50.0	49.5	
58 trans-1,2-Dichloroethene	96	4.231	4.236	-0.005	94	179063	5.00	5.17	
56 Methyl tert-butyl ether	73	4.231	4.236	-0.005	86	296103	5.00	5.05	
59 Hexane	57	4.510	4.514	-0.004	95	314081	5.00	5.15	
60 1,1-Dichloroethane	63	4.684	4.688	-0.004	96	364528	5.00	4.99	
61 Vinyl acetate	43	4.718	4.723	-0.005	96	489475	10.0	10.8	
65 cis-1,2-Dichloroethene	96	5.363	5.367	-0.004	88	175089	5.00	5.02	
67 2-Butanone (MEK)	43	5.363	5.367	-0.004	50	115653	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.380	5.385	-0.005	90	357591	5.00	5.16	
71 sec-Butyl Alcohol	45	5.589	5.576	0.013	97	188288	150.0	134.7	
73 Chlorobromomethane	128	5.659	5.663	-0.004	89	77430	5.00	5.06	
74 Tetrahydrofuran	42	5.711	5.716	-0.005	40	41570	10.0	9.77	
75 Chloroform	83	5.728	5.733	-0.005	96	348497	5.00	5.11	
76 1,1,1-Trichloroethane	97	5.972	5.977	-0.005	97	334275	5.00	5.13	
77 Cyclohexane	56	6.042	6.046	-0.004	97	370277	5.00	5.15	
78 1,1-Dichloropropene	75	6.163	6.168	-0.005	91	295185	5.00	5.05	
79 Carbon tetrachloride	117	6.181	6.186	-0.005	97	312599	5.00	5.16	
80 Isobutyl alcohol	41	6.285	6.290	-0.005	94	58888	125.0	120.3	
81 Benzene	78	6.425	6.429	-0.004	97	549811	5.00	5.10	
82 1,2-Dichloroethane	62	6.442	6.447	-0.005	96	165237	5.00	5.07	
84 n-Heptane	43	6.721	6.725	-0.004	97	498964	5.00	5.22	
86 Trichloroethene	95	7.225	7.230	-0.005	97	227548	5.00	5.19	
88 2-Pentanone	43	7.469	7.474	-0.005	95	317235	20.0	19.4	
89 Methylcyclohexane	55	7.504	7.491	0.013	89	331927	5.00	5.18	
90 1,2-Dichloropropane	63	7.539	7.526	0.013	96	215066	5.00	4.99	
92 Dibromomethane	93	7.696	7.700	-0.004	91	107201	5.00	4.99	
93 1,4-Dioxane	88	7.748	7.718	0.030	30	11405	100.0	100.1	
94 Dichlorobromomethane	83	7.887	7.892	-0.005	98	314609	5.00	5.02	
96 2-Chloroethyl vinyl ether	63	8.287	8.292	-0.005	89	37567	5.00	4.88	
97 cis-1,3-Dichloropropene	75	8.496	8.501	-0.005	91	276201	5.00	5.15	
98 4-Methyl-2-pentanone (MIBK)	43	8.723	8.710	0.013	97	425851	20.0	19.5	
99 Toluene	91	8.966	8.971	-0.005	97	621009	5.00	5.02	
100 trans-1,3-Dichloropropene	75	9.280	9.285	-0.005	98	203021	5.00	5.14	
101 Ethyl methacrylate	69	9.419	9.406	0.013	95	165619	5.00	5.03	
102 1,1,2-Trichloroethane	97	9.541	9.546	-0.005	94	124206	5.00	5.01	
103 Tetrachloroethene	164	9.767	9.772	-0.005	96	191028	5.00	5.16	
104 1,3-Dichloropropane	76	9.785	9.789	-0.004	94	205450	5.00	4.93	
105 2-Hexanone	43	9.924	9.929	-0.005	98	277410	20.0	18.7	
108 Chlorodibromomethane	129	10.150	10.155	-0.005	90	197422	5.00	4.86	
109 Ethylene Dibromide	107	10.324	10.329	-0.005	99	143966	5.00	5.03	
110 1-Chlorohexane	91	11.108	11.113	-0.005	91	315700	5.00	5.05	
111 Chlorobenzene	112	11.143	11.147	-0.004	90	413665	5.00	5.07	
112 1,1,2-Tetrachloroethane	131	11.282	11.287	-0.005	93	201252	5.00	5.11	
113 Ethylbenzene	106	11.317	11.322	-0.005	99	213988	5.00	5.14	
114 m-Xylene & p-Xylene	106	11.508	11.496	0.012	98	290550	5.00	5.14	
115 o-Xylene	106	12.065	12.070	-0.005	99	253986	5.00	5.12	
116 Styrene	104	12.083	12.088	-0.005	93	413563	5.00	5.16	
117 Bromoform	173	12.344	12.349	-0.005	93	112580	5.00	5.14	
118 Isopropylbenzene	105	12.570	12.558	0.012	97	812395	5.00	5.03	
120 Cyclohexanone	55	12.692	12.697	-0.005	95	94188	200.0	188.0	
122 Bromobenzene	156	12.953	12.941	0.012	94	189284	5.00	5.08	
121 1,1,2,2-Tetrachloroethane	83	12.953	12.958	-0.005	94	162847	5.00	4.84	
123 1,2,3-Trichloropropane	110	13.005	12.993	0.012	79	37836	5.00	4.81	
124 trans-1,4-Dichloro-2-butene	53	13.023	13.028	-0.005	70	44139	5.00	5.00	
125 N-Propylbenzene	120	13.075	13.080	-0.005	99	201896	5.00	5.11	
126 2-Chlorotoluene	126	13.180	13.184	-0.004	96	150706	5.00	4.92	
127 1,3,5-Trimethylbenzene	105	13.301	13.289	0.012	94	610567	5.00	5.00	
128 4-Chlorotoluene	126	13.319	13.306	0.013	98	193360	5.00	4.88	
129 tert-Butylbenzene	119	13.667	13.672	-0.005	95	664399	5.00	5.01	
130 1,2,4-Trimethylbenzene	105	13.719	13.724	-0.005	96	580572	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.928	13.916	0.012	95	177196	5.00	5.06	
132 1,3-Dichlorobenzene	146	14.050	14.037	0.013	97	276824	5.00	4.89	
133 4-Isopropyltoluene	119	14.085	14.072	0.013	98	767309	5.00	5.10	
134 1,4-Dichlorobenzene	146	14.137	14.142	-0.005	93	443692	5.00	5.08	
137 n-Butylbenzene	91	14.503	14.507	-0.004	99	798058	5.00	5.05	
138 1,2-Dichlorobenzene	146	14.537	14.542	-0.005	96	298057	5.00	5.02	
139 1,2-Dibromo-3-Chloropropan	157	15.304	15.326	-0.022	79	27832	5.00	5.02	
144 1,2,3-Trichlorobenzene	180	16.540	16.074	0.466	94	158675	5.00	4.07	a
142 Hexachlorobutadiene	225	16.226	16.231	-0.005	96	209088	5.00	5.03	
143 Naphthalene	128	16.296	16.301	-0.005	98	221754	5.00	4.88	
141 1,2,4-Trichlorobenzene	180	16.087	16.527	-0.440	94	201768	5.00	5.59	a
S 151 1,2-Dichloroethene, Total	96				0		10.0	10.2	
S 145 Trihalomethanes, Total	1				0		20.0	20.1	
S 146 Xylenes, Total (URS)	1				0		10.0	10.3	
S 147 Total BTEX	1				0			25.5	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.3	
S 149 1,2-Dichloroethene, Total	1				0		10.0	10.2	
S 150 Xylenes, Total	106				0		10.0	10.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 2.50	Units: uL
MV-Gas/Ket A_00033	Amount Added: 2.50	Units: uL
MV-2cleve+AVA_00009	Amount Added: 2.50	Units: uL

Report Date: 02-Jun-2015 08:04:17

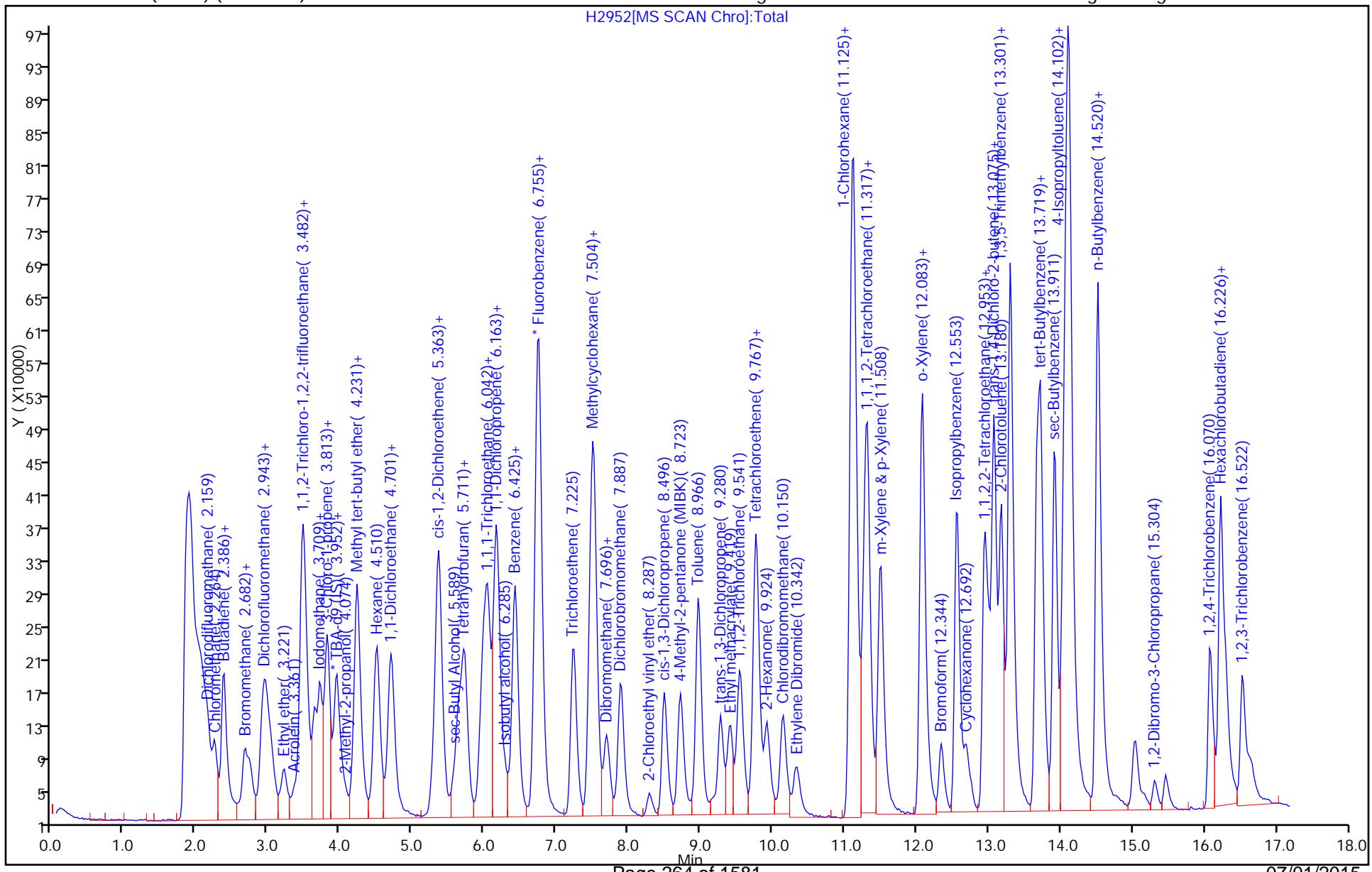
Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2952.D
 Injection Date: 28-May-2015 01:25:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: BERGERB
 Worklist Smp#: 12

ALS Bottle#: 6



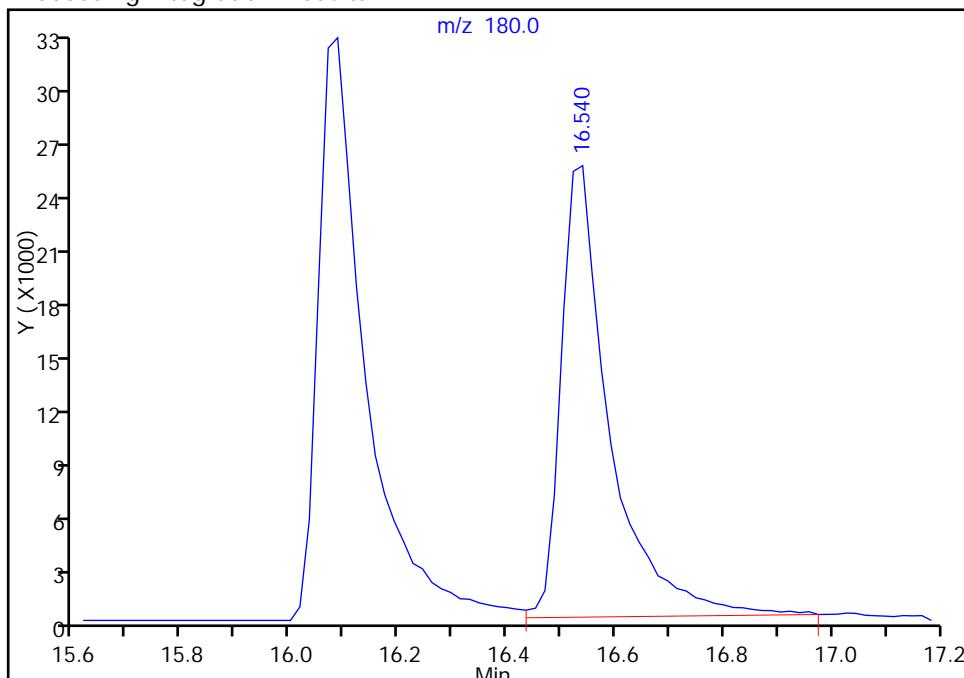
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2952.D
 Injection Date: 28-May-2015 01:25:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 6 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

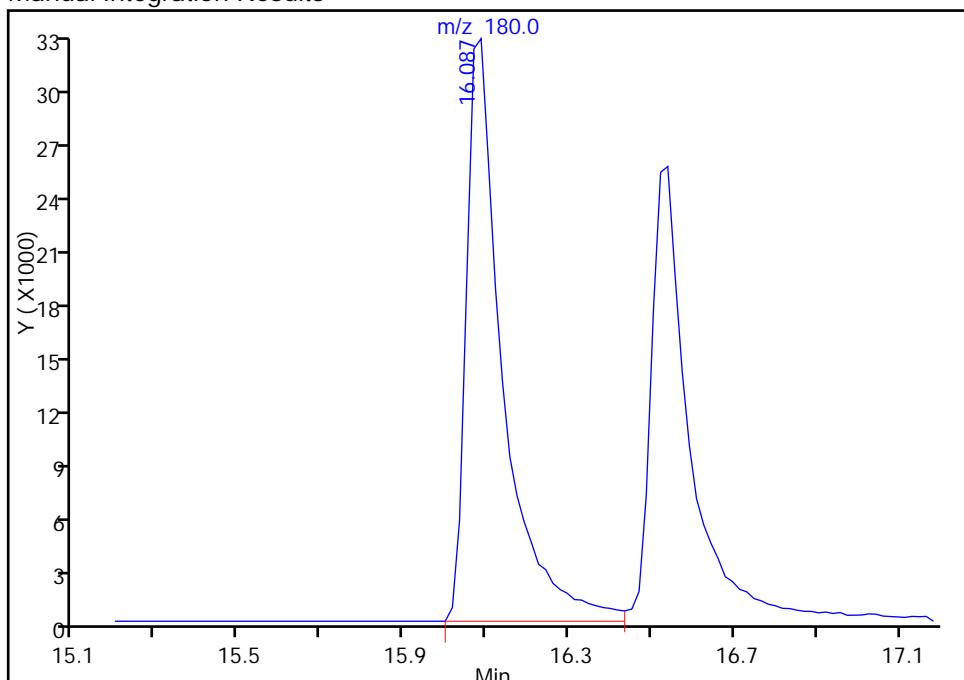
RT: 16.54
 Area: 158675
 Amount: 4.554130
 Amount Units: ug/l

Processing Integration Results



RT: 16.09
 Area: 201768
 Amount: 5.593289
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:17

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

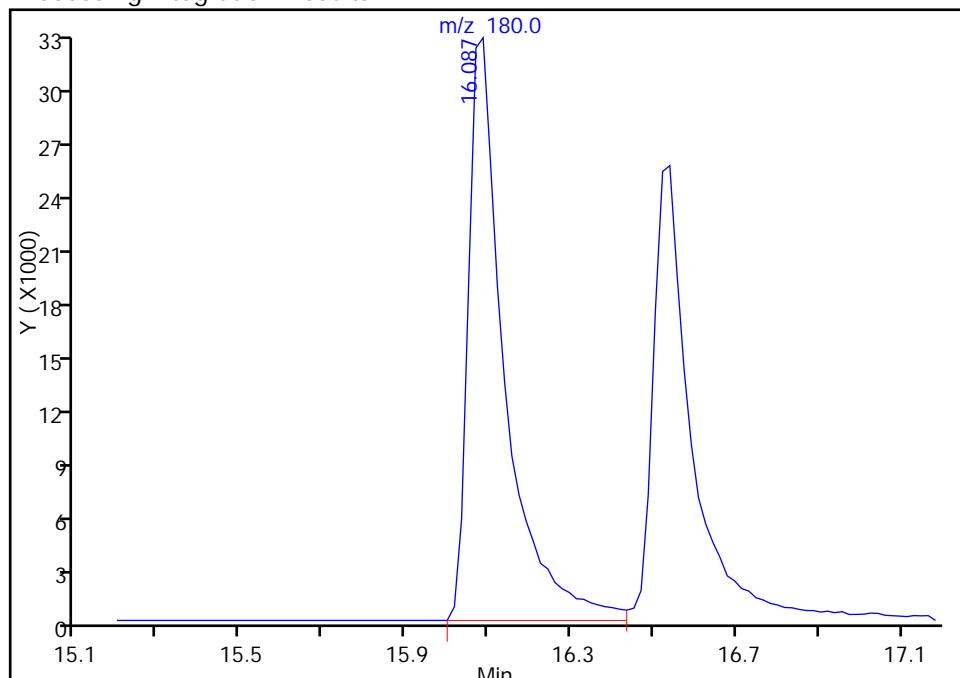
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2952.D
 Injection Date: 28-May-2015 01:25:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 6 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

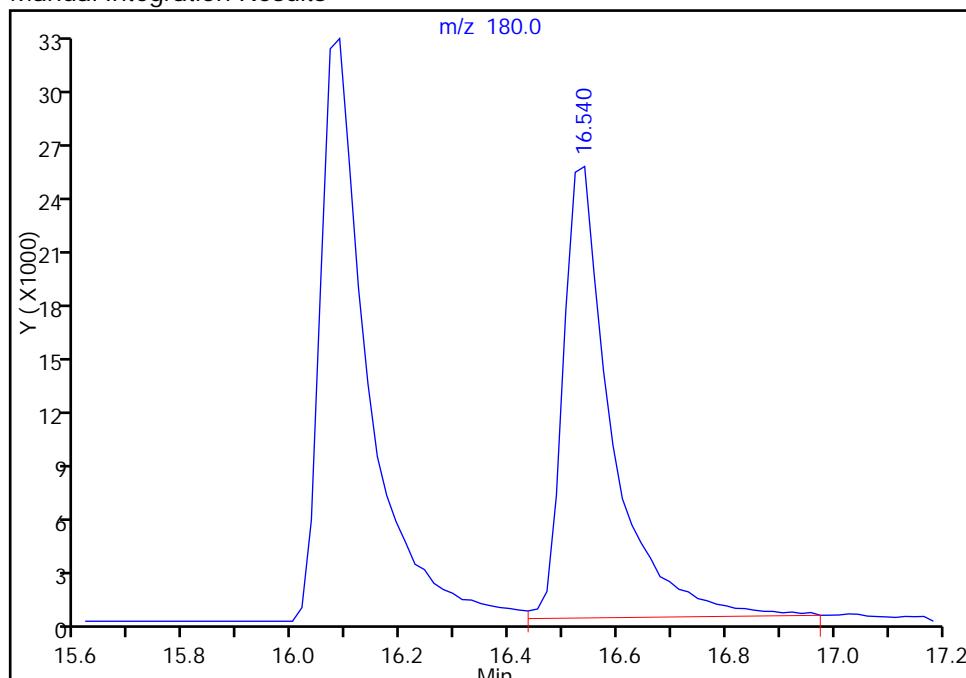
RT: 16.09
 Area: 201768
 Amount: 5.061159
 Amount Units: ug/l

Processing Integration Results



RT: 16.54
 Area: 158675
 Amount: 4.074146
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:17

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2953.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 28-May-2015 01:48:30 ALS Bottle#: 7 Worklist Smp#: 13
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:04:33 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: wickhamt

Date: 28-May-2015 06:16:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.975	3.975	0.000	97	213064	250.0	250.0	
* 2 Fluorobenzene	96	6.760	6.760	0.000	97	1060270	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.113	11.113	0.000	93	230984	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.107	14.107	0.000	97	388500	12.5	12.5	
28 Dichlorodifluoromethane	85	2.164	2.164	0.000	98	490322	10.0	9.60	
30 Chloromethane	50	2.269	2.269	0.000	98	338017	10.0	10.2	
31 Butadiene	54	2.373	2.373	0.000	0	261973	NC	NC	
32 Vinyl chloride	62	2.390	2.390	0.000	98	329568	10.0	10.2	
35 Bromomethane	94	2.669	2.669	0.000	91	285208	10.0	10.6	
36 Chloroethane	64	2.756	2.756	0.000	100	210596	10.0	10.7	
37 Dichlorodifluoromethane	67	2.930	2.930	0.000	99	766394	10.0	10.8	
38 Trichlorodifluoromethane	101	2.982	2.982	0.000	99	675996	10.0	10.6	
40 Ethyl ether	59	3.226	3.226	0.000	93	171739	10.0	10.2	
44 Acrolein	56	3.365	3.365	0.000	98	113181	100.0	97.6	
45 1,1-Dichloroethene	96	3.470	3.470	0.000	94	321941	10.0	10.2	
46 1,1,2-Trichloro-1,2,2-trif	151	3.487	3.487	0.000	98	443684	10.0	10.3	
47 Acetone	43	3.505	3.505	0.000	97	132884	40.0	40.3	
48 Iodomethane	142	3.644	3.644	0.000	99	723408	10.0	10.2	
50 Carbon disulfide	76	3.731	3.731	0.000	100	1216758	10.0	9.97	
52 3-Chloro-1-propene	41	3.818	3.818	0.000	91	733581	10.0	9.98	
53 Methyl acetate	43	3.818	3.818	0.000	97	568374	50.0	53.2	
54 Methylene Chloride	84	3.957	3.957	0.000	98	289949	10.0	10.3	
55 2-Methyl-2-propanol	59	4.062	4.062	0.000	95	103361	100.0	99.7	
57 Acrylonitrile	53	4.201	4.201	0.000	97	286517	100.0	103.7	
58 trans-1,2-Dichloroethene	96	4.236	4.236	0.000	95	351195	10.0	9.86	
56 Methyl tert-butyl ether	73	4.236	4.236	0.000	96	620688	10.0	10.3	
59 Hexane	57	4.514	4.514	0.000	95	656745	10.0	10.6	
60 1,1-Dichloroethane	63	4.688	4.688	0.000	96	742521	10.0	9.87	
61 Vinyl acetate	43	4.723	4.723	0.000	96	959261	20.0	20.6	
65 cis-1,2-Dichloroethene	96	5.367	5.367	0.000	88	367183	10.0	10.2	
67 2-Butanone (MEK)	43	5.367	5.367	0.000	96	271060	40.0	44.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.385	5.385	0.000	91	676578	10.0	10.1	
71 sec-Butyl Alcohol	45	5.576	5.576	0.000	96	424147	300.0	278.0	
73 Chlorobromomethane	128	5.663	5.663	0.000	89	163111	10.0	10.4	
74 Tetrahydrofuran	42	5.716	5.716	0.000	94	91342	20.0	20.9	
75 Chloroform	83	5.733	5.733	0.000	96	703605	10.0	10.0	
76 1,1,1-Trichloroethane	97	5.977	5.977	0.000	96	682150	10.0	10.2	
77 Cyclohexane	56	6.046	6.046	0.000	97	759284	10.0	10.3	
78 1,1-Dichloropropene	75	6.168	6.168	0.000	92	587910	10.0	9.78	
79 Carbon tetrachloride	117	6.186	6.186	0.000	98	634790	10.0	10.2	
80 Isobutyl alcohol	41	6.290	6.290	0.000	91	133112	250.0	249.1	
81 Benzene	78	6.429	6.429	0.000	98	1127346	10.0	10.1	
82 1,2-Dichloroethane	62	6.447	6.447	0.000	96	340868	10.0	10.2	
84 n-Heptane	43	6.725	6.725	0.000	97	1009732	10.0	10.3	
86 Trichloroethene	95	7.230	7.230	0.000	97	465659	10.0	10.3	
88 2-Pentanone	43	7.474	7.474	0.000	96	715858	40.0	42.4	
89 Methylcyclohexane	55	7.491	7.491	0.000	90	687055	10.0	10.4	
90 1,2-Dichloropropane	63	7.526	7.526	0.000	87	443299	10.0	10.0	
92 Dibromomethane	93	7.700	7.700	0.000	92	221961	10.0	10.0	
93 1,4-Dioxane	88	7.718	7.718	0.000	30	24744	200.0	197.9	
94 Dichlorobromomethane	83	7.892	7.892	0.000	98	672865	10.0	10.4	
96 2-Chloroethyl vinyl ether	63	8.292	8.292	0.000	88	74647	10.0	9.41	
97 cis-1,3-Dichloropropene	75	8.501	8.501	0.000	91	571072	10.0	10.5	
98 4-Methyl-2-pentanone (MIBK)	43	8.710	8.710	0.000	97	1002764	40.0	44.5	
99 Toluene	91	8.971	8.971	0.000	97	1267160	10.0	9.95	
100 trans-1,3-Dichloropropene	75	9.285	9.285	0.000	99	414785	10.0	10.2	
101 Ethyl methacrylate	69	9.406	9.406	0.000	96	351571	10.0	10.5	
102 1,1,2-Trichloroethane	97	9.546	9.546	0.000	93	248293	10.0	9.73	
103 Tetrachloroethene	164	9.772	9.772	0.000	95	395487	10.0	10.5	
104 1,3-Dichloropropane	76	9.789	9.789	0.000	95	440887	10.0	10.4	
105 2-Hexanone	43	9.929	9.929	0.000	98	653257	40.0	42.6	
108 Chlorodibromomethane	129	10.155	10.155	0.000	90	424072	10.0	10.3	
109 Ethylene Dibromide	107	10.329	10.329	0.000	98	309647	10.0	10.7	
110 1-Chlorohexane	91	11.113	11.113	0.000	92	633113	10.0	9.97	
111 Chlorobenzene	112	11.147	11.147	0.000	87	859727	10.0	10.4	
112 1,1,2-Tetrachloroethane	131	11.287	11.287	0.000	94	419142	10.0	10.5	
113 Ethylbenzene	106	11.322	11.322	0.000	99	449228	10.0	10.6	
114 m-Xylene & p-Xylene	106	11.496	11.496	0.000	97	601905	10.0	10.5	
115 o-Xylene	106	12.070	12.070	0.000	99	528399	10.0	10.5	
116 Styrene	104	12.088	12.088	0.000	93	858871	10.0	10.5	
117 Bromoform	173	12.349	12.349	0.000	94	243755	10.0	11.0	
118 Isopropylbenzene	105	12.558	12.558	0.000	97	1680664	10.0	10.1	
120 Cyclohexanone	55	12.697	12.697	0.000	98	223269	400.0	436.6	
122 Bromobenzene	156	12.941	12.941	0.000	94	397495	10.0	10.4	
121 1,1,2,2-Tetrachloroethane	83	12.958	12.958	0.000	93	350506	10.0	10.1	
123 1,2,3-Trichloropropane	110	12.993	12.993	0.000	82	79592	10.0	9.82	
124 trans-1,4-Dichloro-2-butene	53	13.028	13.028	0.000	68	86189	10.0	9.48	
125 N-Propylbenzene	120	13.080	13.080	0.000	99	412525	10.0	10.1	
126 2-Chlorotoluene	126	13.184	13.184	0.000	96	320058	10.0	10.1	
127 1,3,5-Trimethylbenzene	105	13.289	13.289	0.000	94	1267667	10.0	10.1	
128 4-Chlorotoluene	126	13.306	13.306	0.000	98	412960	10.0	10.1	
129 tert-Butylbenzene	119	13.672	13.672	0.000	94	1369653	10.0	10.0	
130 1,2,4-Trimethylbenzene	105	13.724	13.724	0.000	97	1206077	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.916	13.916	0.000	95	365299	10.0	10.1	
132 1,3-Dichlorobenzene	146	14.037	14.037	0.000	96	591386	10.0	10.1	
133 4-Isopropyltoluene	119	14.072	14.072	0.000	98	1595405	10.0	10.3	
134 1,4-Dichlorobenzene	146	14.142	14.142	0.000	93	897375	10.0	9.96	
137 n-Butylbenzene	91	14.507	14.507	0.000	99	1632647	10.0	10.0	
138 1,2-Dichlorobenzene	146	14.542	14.542	0.000	96	626018	10.0	10.2	
139 1,2-Dibromo-3-Chloropropan	157	15.326	15.326	0.000	77	61145	10.0	10.7	
144 1,2,3-Trichlorobenzene	180	16.527	16.527	0.000	93	333902	10.0	9.55	a
142 Hexachlorobutadiene	225	16.231	16.231	0.000	97	438309	10.0	10.2	
143 Naphthalene	128	16.301	16.301	0.000	98	486464	10.0	10.4	
141 1,2,4-Trichlorobenzene	180	16.074	16.074	0.000	94	429478	10.0	11.1	a
S 151 1,2-Dichloroethene, Total	96				0		20.0	20.1	
S 145 Trihalomethanes, Total	1				0		40.0	41.7	
S 146 Xylenes, Total (URS)	1				0		20.0	21.0	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.7	
S 149 1,2-Dichloroethene, Total	1				0		20.0	20.1	
S 150 Xylenes, Total	106				0		20.0	21.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

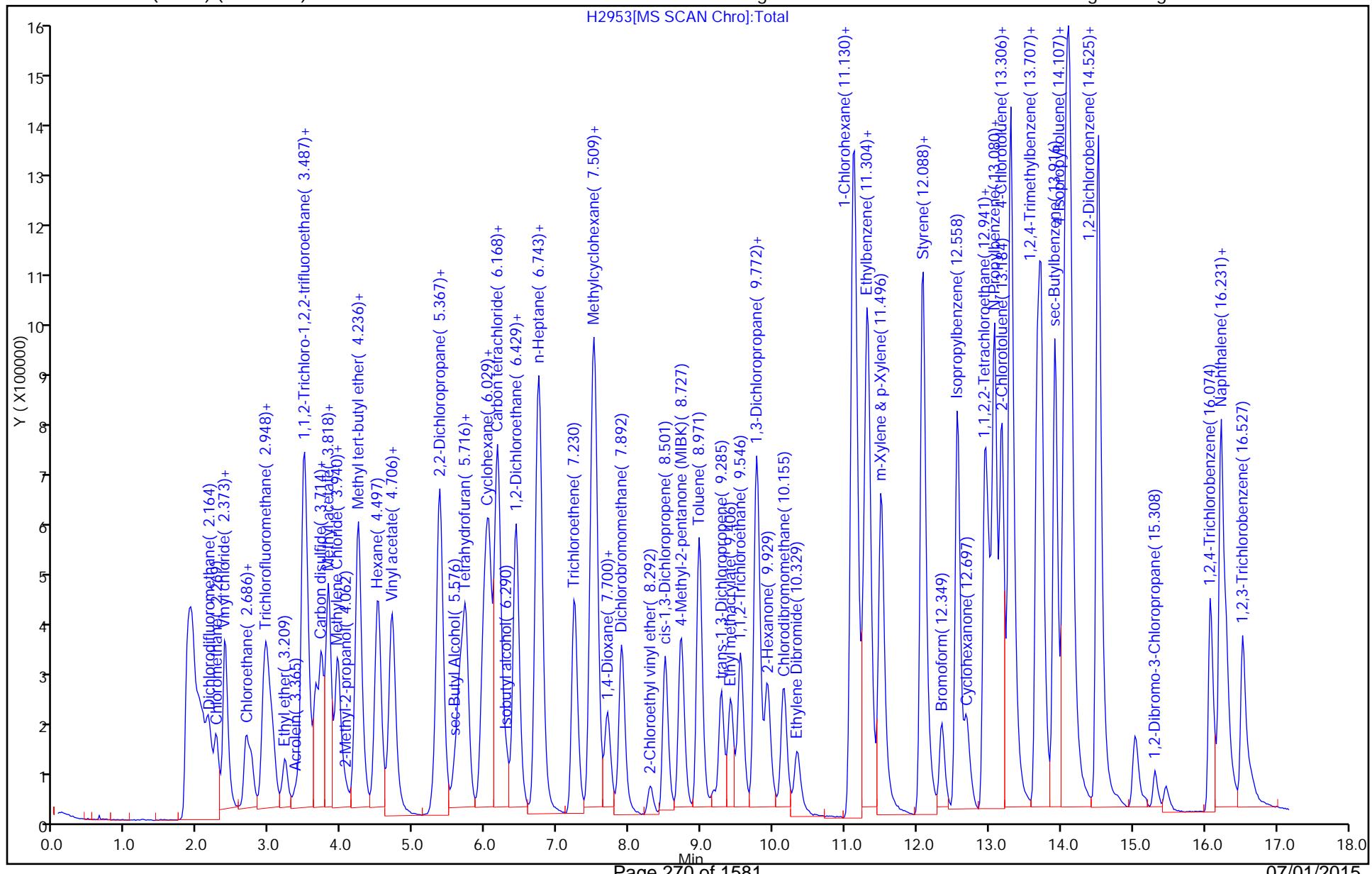
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MV-Main A_00022	Amount Added: 5.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 5.00	Units: uL

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 Injection Date: 28-May-2015 01:48:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: BERGERB
 Worklist Smp#: 13



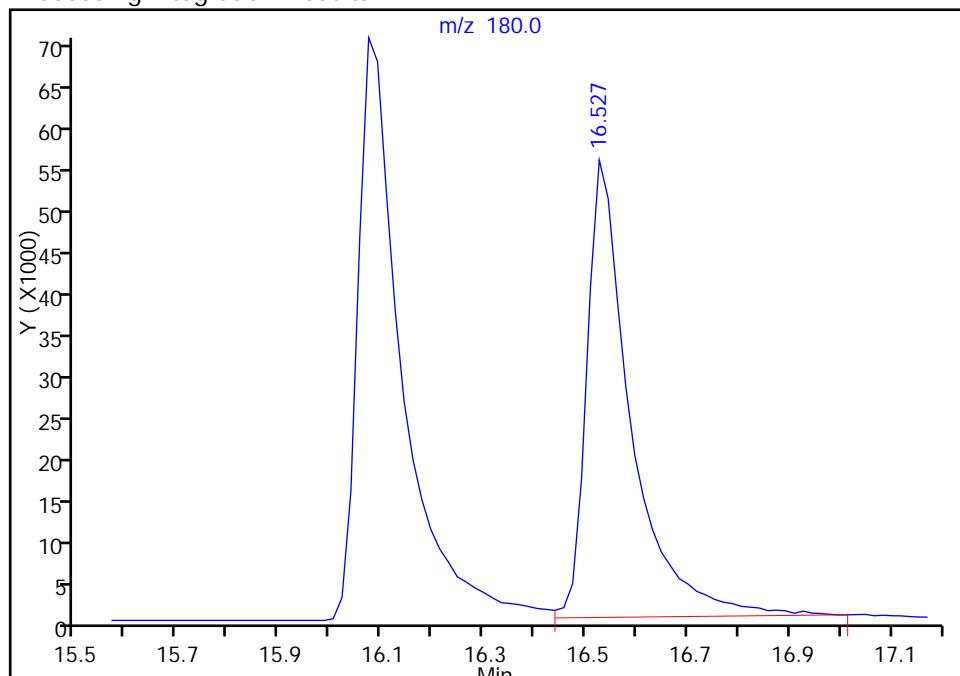
TestAmerica Denver

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 Injection Date: 28-May-2015 01:48:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 7 Worklist Smp#: 13
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

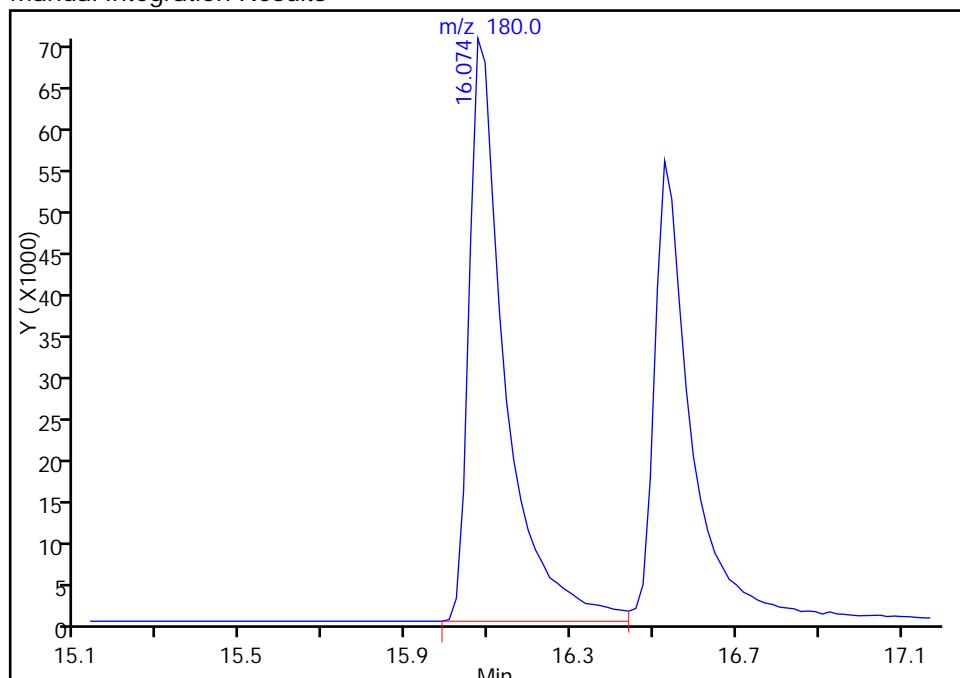
RT: 16.53
 Area: 333902
 Amount: 8.982972
 Amount Units: ug/l

Processing Integration Results



RT: 16.07
 Area: 429478
 Amount: 11.144875
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:33

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

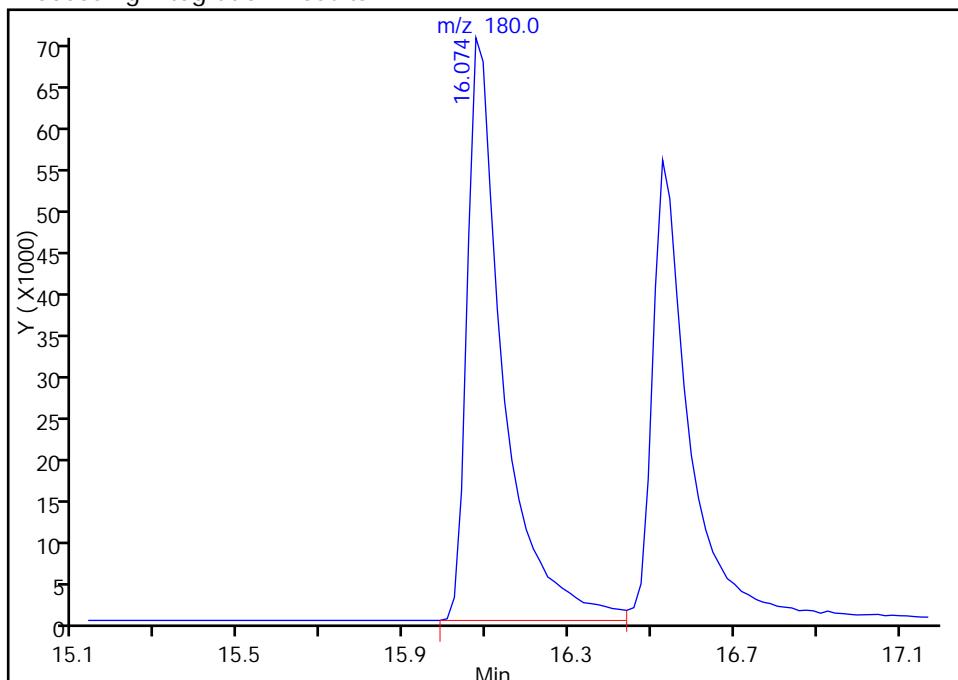
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2953.D
 Injection Date: 28-May-2015 01:48:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 7 Worklist Smp#: 13
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

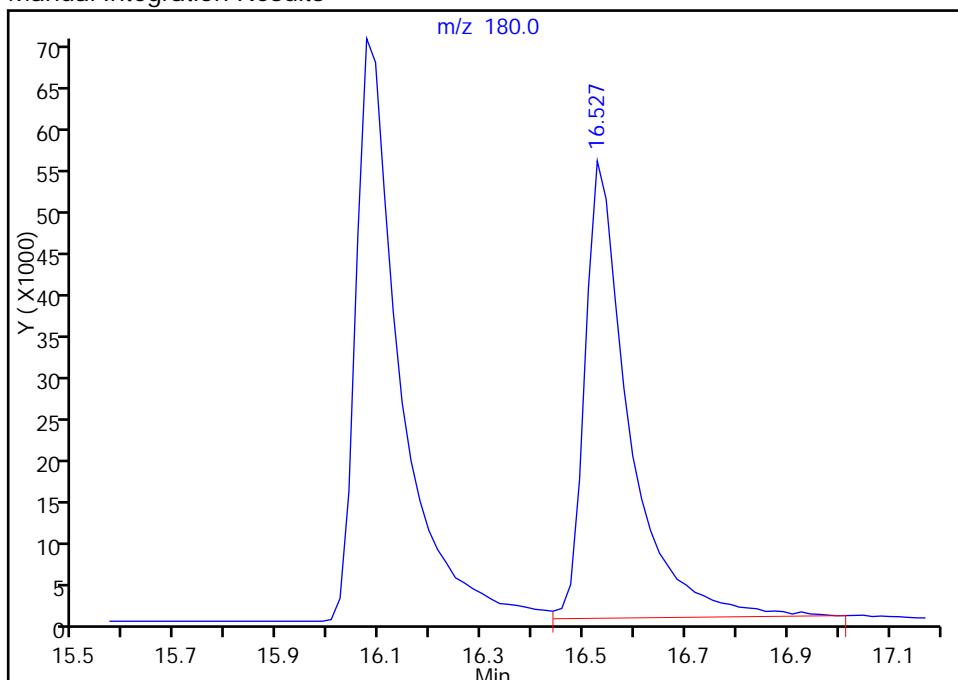
RT: 16.07
 Area: 429478
 Amount: 10.403969
 Amount Units: ug/l

Processing Integration Results



RT: 16.53
 Area: 333902
 Amount: 9.551391
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:33

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2954.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 28-May-2015 02:10:30 ALS Bottle#: 8 Worklist Smp#: 14
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:04:52 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: wickhamt

Date: 28-May-2015 06:25:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.987	3.975	0.012	96	211743	250.0	250.0	
* 2 Fluorobenzene	96	6.773	6.760	0.013	95	1066896	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.108	11.113	-0.005	93	237911	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.107	0.013	95	406093	12.5	12.5	
28 Dichlorodifluoromethane	85	2.159	2.164	-0.005	98	1582945	30.0	30.6	
30 Chloromethane	50	2.264	2.269	-0.005	99	1032956	30.0	31.1	
31 Butadiene	54	2.386	2.373	0.013	0	810368	NC	NC	
32 Vinyl chloride	62	2.386	2.390	-0.004	98	1028076	30.0	31.6	
35 Bromomethane	94	2.682	2.669	0.013	90	847148	30.0	31.4	
36 Chloroethane	64	2.751	2.756	-0.005	100	614520	30.0	31.1	
37 Dichlorodifluoromethane	67	2.925	2.930	-0.005	99	2336784	30.0	32.6	
38 Trichlorodifluoromethane	101	2.995	2.982	0.013	100	2060386	30.0	32.1	
40 Ethyl ether	59	3.221	3.226	-0.005	94	502993	30.0	29.7	
44 Acrolein	56	3.361	3.365	-0.004	100	354662	300.0	304.1	
45 1,1-Dichloroethene	96	3.465	3.470	-0.005	94	937902	30.0	29.4	
46 1,1,2-Trichloro-1,2,2-trif	151	3.500	3.487	0.013	98	1309750	30.0	30.2	
47 Acetone	43	3.517	3.505	0.012	98	376529	120.0	113.4	
48 Iodomethane	142	3.639	3.644	-0.005	99	2111383	30.0	29.4	
50 Carbon disulfide	76	3.726	3.731	-0.005	100	3580245	30.0	29.1	
52 3-Chloro-1-propene	41	3.813	3.818	-0.005	90	2163538	30.0	29.3	
53 Methyl acetate	43	3.831	3.818	0.013	98	1670946	150.0	155.5	
54 Methylene Chloride	84	3.953	3.957	-0.004	98	814145	30.0	29.7	
55 2-Methyl-2-propanol	59	4.057	4.062	-0.005	92	300590	300.0	300.7	
57 Acrylonitrile	53	4.196	4.201	-0.005	98	863563	300.0	310.6	
58 trans-1,2-Dichloroethene	96	4.231	4.236	-0.005	95	1056693	30.0	29.5	
56 Methyl tert-butyl ether	73	4.249	4.236	0.013	98	1794782	30.0	29.6	
59 Hexane	57	4.510	4.514	-0.004	95	1936877	30.0	30.4	
60 1,1-Dichloroethane	63	4.684	4.688	-0.004	96	2206706	30.0	29.2	
61 Vinyl acetate	43	4.719	4.723	-0.004	96	3086662	60.0	65.9	
65 cis-1,2-Dichloroethene	96	5.363	5.367	-0.004	89	1074834	30.0	29.8	
67 2-Butanone (MEK)	43	5.363	5.367	-0.004	97	820646	120.0	134.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.380	5.385	-0.005	92	1911674	30.0	29.9	
71 sec-Butyl Alcohol	45	5.572	5.576	-0.004	96	1291377	900.0	851.8	
73 Chlorobromomethane	128	5.659	5.663	-0.004	90	488660	30.0	30.8	
74 Tetrahydrofuran	42	5.711	5.716	-0.005	97	265724	60.0	60.3	
75 Chloroform	83	5.728	5.733	-0.005	97	2084195	30.0	29.5	
76 1,1,1-Trichloroethane	97	5.972	5.977	-0.005	97	2022539	30.0	30.0	
77 Cyclohexane	56	6.059	6.046	0.013	97	2254936	30.0	30.3	
78 1,1-Dichloropropene	75	6.164	6.168	-0.004	92	1748830	30.0	28.9	
79 Carbon tetrachloride	117	6.181	6.186	-0.005	97	1914881	30.0	30.5	
80 Isobutyl alcohol	41	6.286	6.290	-0.004	91	420168	750.0	791.2	
81 Benzene	78	6.425	6.429	-0.004	98	3405649	30.0	30.5	
82 1,2-Dichloroethane	62	6.442	6.447	-0.005	96	1008279	30.0	29.9	
84 n-Heptane	43	6.721	6.725	-0.004	97	3019511	30.0	30.5	
86 Trichloroethene	95	7.243	7.230	0.013	97	1391651	30.0	30.6	
88 2-Pentanone	43	7.469	7.474	-0.005	96	2088712	120.0	123.0	
89 Methylcyclohexane	55	7.504	7.491	0.013	90	2049189	30.0	30.9	
90 1,2-Dichloropropane	63	7.539	7.526	0.013	89	1320707	30.0	29.6	
92 Dibromomethane	93	7.696	7.700	-0.004	92	654298	30.0	29.4	
93 1,4-Dioxane	88	7.731	7.718	0.013	31	87288	600.0	663.8	
94 Dichlorobromomethane	83	7.905	7.892	0.013	98	1964681	30.0	30.2	
96 2-Chloroethyl vinyl ether	63	8.288	8.292	-0.004	89	271671	30.0	34.0	
97 cis-1,3-Dichloropropene	75	8.497	8.501	-0.004	91	1713888	30.0	30.6	
98 4-Methyl-2-pentanone (MIBK)	43	8.723	8.710	0.013	97	2918765	120.0	128.5	
99 Toluene	91	8.984	8.971	0.013	97	3836921	30.0	29.9	
100 trans-1,3-Dichloropropene	75	9.280	9.285	-0.005	98	1231322	30.0	30.1	
101 Ethyl methacrylate	69	9.419	9.406	0.013	97	1050575	30.0	30.5	
102 1,1,2-Trichloroethane	97	9.559	9.546	0.013	93	735362	30.0	28.6	
103 Tetrachloroethene	164	9.767	9.772	-0.005	96	1183439	30.0	30.6	
104 1,3-Dichloropropane	76	9.802	9.789	0.013	95	1297830	30.0	29.8	
105 2-Hexanone	43	9.924	9.929	-0.005	98	1981716	120.0	124.4	
108 Chlorodibromomethane	129	10.150	10.155	-0.005	90	1317455	30.0	31.0	
109 Ethylene Dibromide	107	10.342	10.329	0.013	98	925921	30.0	30.9	
110 1-Chlorohexane	91	11.125	11.113	0.012	91	1911706	30.0	29.2	
111 Chlorobenzene	112	11.160	11.147	0.013	90	2540363	30.0	29.8	
112 1,1,2-Tetrachloroethane	131	11.282	11.287	-0.005	96	1254447	30.0	30.5	
113 Ethylbenzene	106	11.334	11.322	0.012	99	1300912	30.0	29.9	
114 m-Xylene & p-Xylene	106	11.508	11.496	0.012	98	1816296	30.0	30.7	
115 o-Xylene	106	12.083	12.070	0.013	99	1578391	30.0	30.4	
116 Styrene	104	12.100	12.088	0.012	93	2556260	30.0	30.5	
117 Bromoform	173	12.344	12.349	-0.005	94	737056	30.0	32.2	
118 Isopropylbenzene	105	12.570	12.558	0.012	97	4996844	30.0	28.7	
120 Cyclohexanone	55	12.692	12.697	-0.005	98	677839	1200.0	1283.6	
122 Bromobenzene	156	12.953	12.941	0.012	97	1204988	30.0	30.0	
121 1,1,2,2-Tetrachloroethane	83	12.953	12.958	-0.005	94	1042084	30.0	28.8	
123 1,2,3-Trichloropropane	110	13.006	12.993	0.013	82	231112	30.0	27.3	
124 trans-1,4-Dichloro-2-butene	53	13.023	13.028	-0.005	71	257129	30.0	27.1	
125 N-Propylbenzene	120	13.075	13.080	-0.005	99	1211930	30.0	28.5	
126 2-Chlorotoluene	126	13.180	13.184	-0.004	95	938094	30.0	28.4	
127 1,3,5-Trimethylbenzene	105	13.302	13.289	0.013	95	3748579	30.0	28.5	
128 4-Chlorotoluene	126	13.319	13.306	0.013	99	1265565	30.0	29.7	
129 tert-Butylbenzene	119	13.685	13.672	0.013	95	4067161	30.0	28.5	
130 1,2,4-Trimethylbenzene	105	13.737	13.724	0.013	95	3557690	30.0	28.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.928	13.916	0.012	95	1080246	30.0	28.7	
132 1,3-Dichlorobenzene	146	14.050	14.037	0.013	96	1735503	30.0	28.5	
133 4-Isopropyltoluene	119	14.085	14.072	0.013	98	4713028	30.0	29.1	
134 1,4-Dichlorobenzene	146	14.137	14.142	-0.005	93	2812786	30.0	29.9	
137 n-Butylbenzene	91	14.520	14.507	0.013	99	4897561	30.0	28.8	
138 1,2-Dichlorobenzene	146	14.538	14.542	-0.004	96	1890736	30.0	29.6	
139 1,2-Dibromo-3-Chloropropan	157	15.304	15.326	-0.022	80	184811	30.0	30.9	
141 1,2,4-Trichlorobenzene	180	16.087	16.074	0.013	94	1320265	30.0	31.8	a
142 Hexachlorobutadiene	225	16.226	16.231	-0.005	97	1302417	30.0	29.1	
143 Naphthalene	128	16.296	16.301	-0.005	97	1488412	30.0	30.4	
144 1,2,3-Trichlorobenzene	180	16.540	16.527	0.013	93	1050261	30.0	29.8	a
S 151 1,2-Dichloroethene, Total	96				0		60.0	59.2	
S 145 Trihalomethanes, Total	1				0		120.0	122.9	
S 146 Xylenes, Total (URS)	1				0		60.0	61.1	
S 147 Total BTEX	1				0			151.5	
S 148 1,3-Dichloropropene, Total	1				0		60.0	60.7	
S 149 1,2-Dichloroethene, Total	1				0		60.0	59.2	
S 150 Xylenes, Total	106				0		60.0	61.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 15.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 15.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 15.00	Units: uL

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2954.D
 Injection Date: 28-May-2015 02:10:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

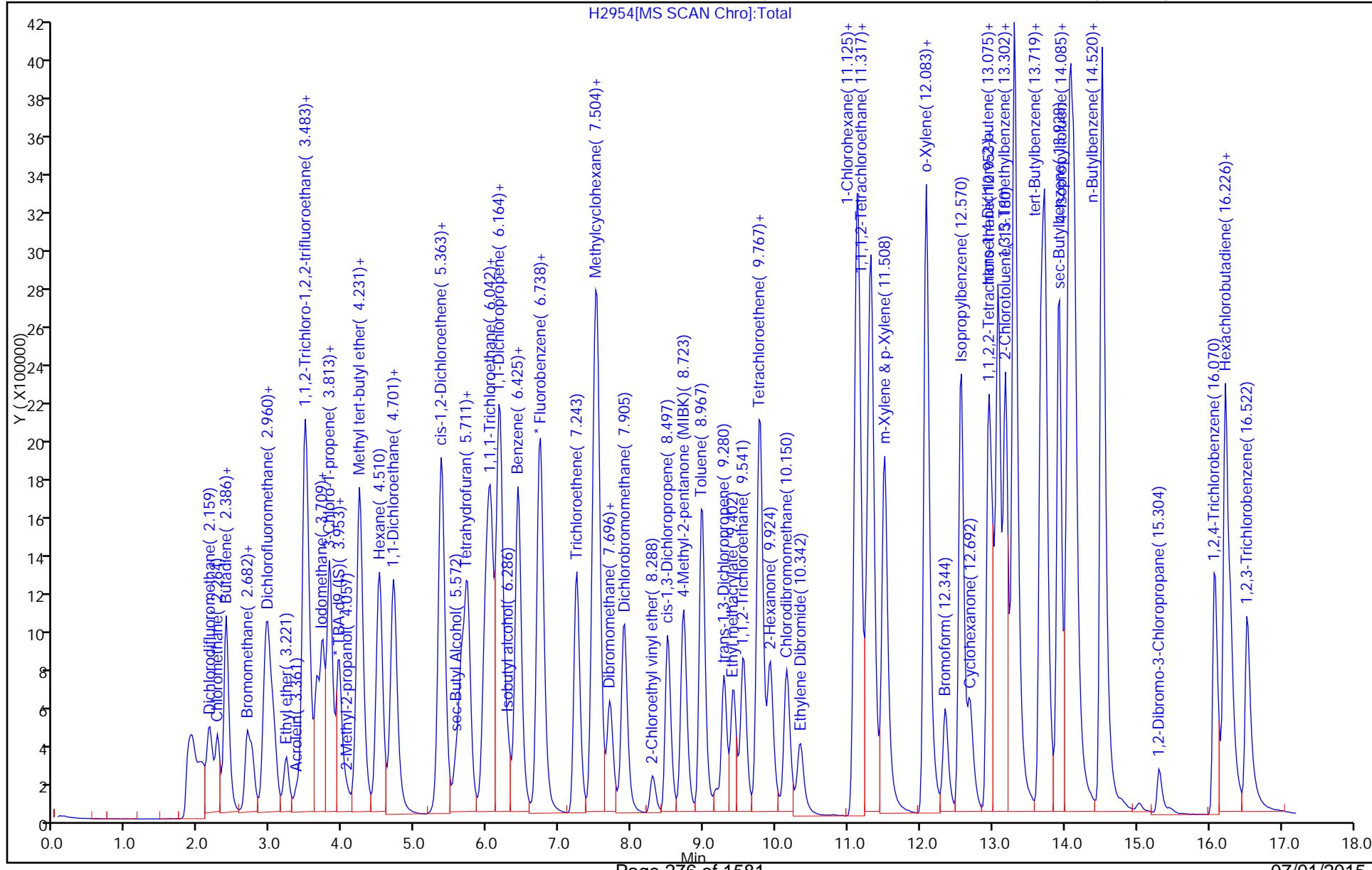
Instrument ID: VMS_H

Operator ID: BERGERB
Worklist Smp#: 14Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 8

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

H2954[MS SCAN Chro]:Total



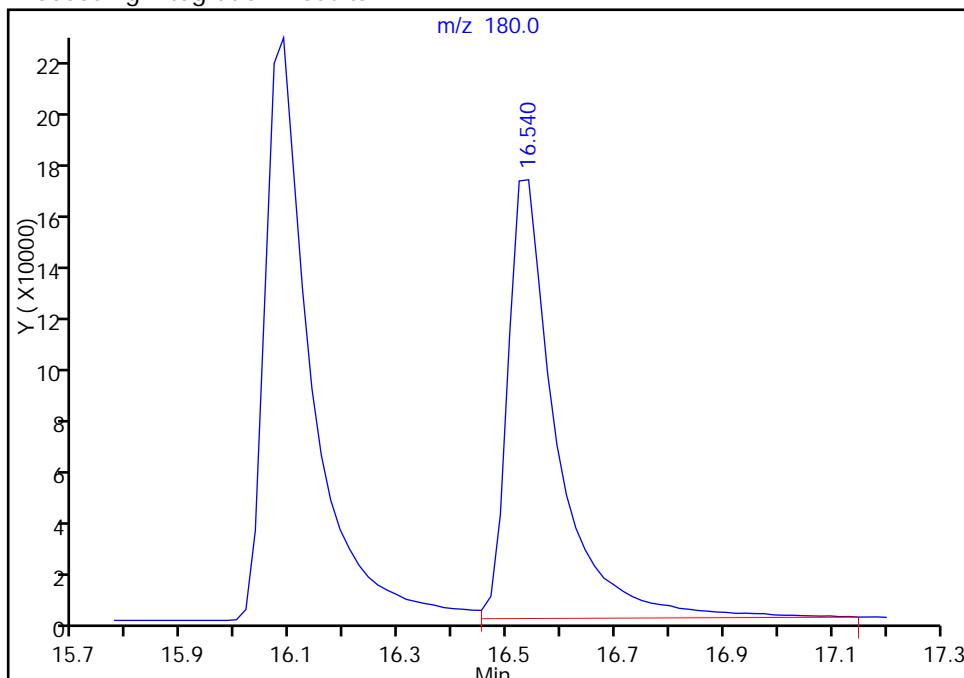
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2954.D
 Injection Date: 28-May-2015 02:10:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 8 Worklist Smp#: 14
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

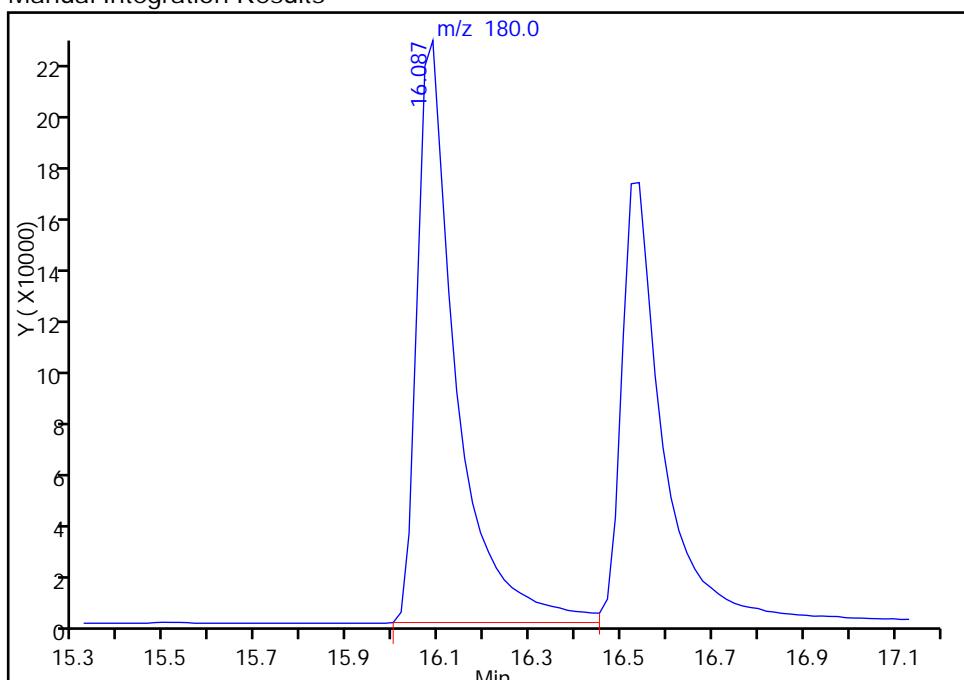
RT: 16.54
 Area: 1050261
 Amount: 26.073362
 Amount Units: ug/l

Processing Integration Results



RT: 16.09
 Area: 1320265
 Amount: 31.762542
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:52

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

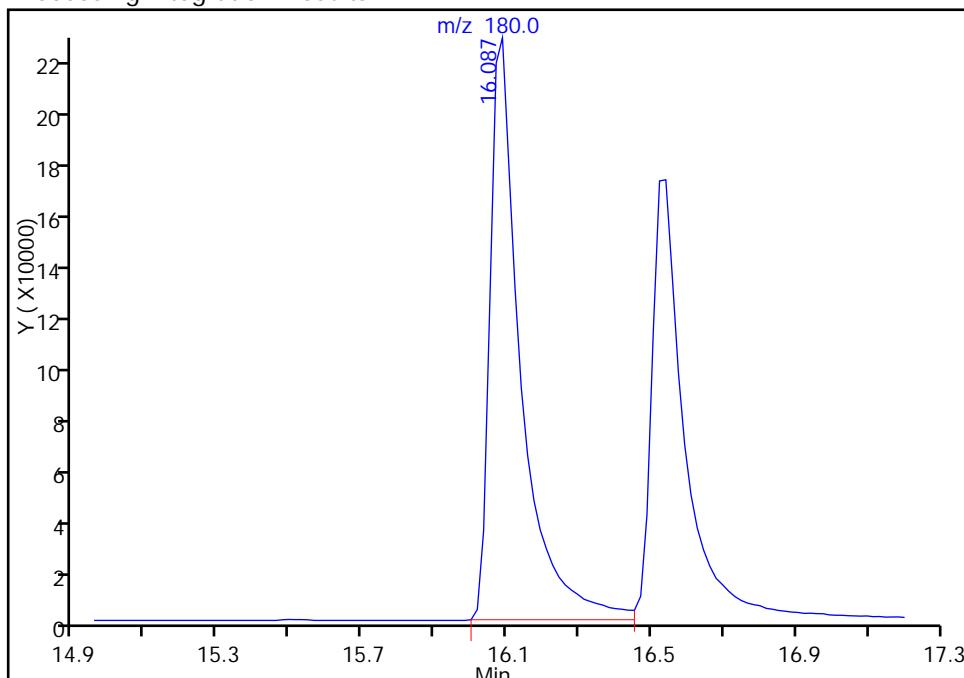
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2954.D
 Injection Date: 28-May-2015 02:10:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 8 Worklist Smp#: 14
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

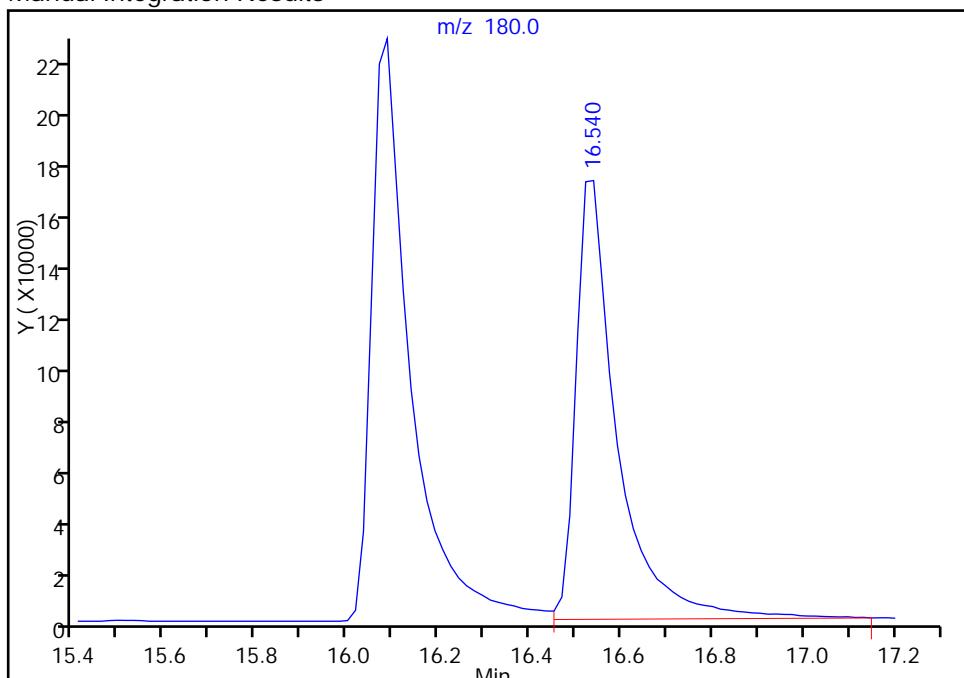
RT: 16.09
 Area: 1320265
 Amount: 36.130523
 Amount Units: ug/l

Processing Integration Results



RT: 16.54
 Area: 1050261
 Amount: 29.789730
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:04:52

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2955.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 28-May-2015 02:33:30 ALS Bottle#: 9 Worklist Smp#: 15
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 08:05:05 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: wickhamt

Date:

28-May-2015 06:35:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.994	3.975	0.019	96	189827	250.0	250.0	
* 2 Fluorobenzene	96	6.779	6.760	0.019	97	1088738	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.114	11.113	0.001	91	232172	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.126	14.107	0.019	95	409472	12.5	12.5	
28 Dichlorodifluoromethane	85	2.166	2.164	0.002	98	3195464	60.0	60.4	
30 Chloromethane	50	2.270	2.269	0.001	98	2063538	60.0	60.9	
31 Butadiene	54	2.374	2.373	0.001	0	1655066	NC	NC	
32 Vinyl chloride	62	2.392	2.390	0.002	98	2088314	60.0	63.0	
35 Bromomethane	94	2.688	2.669	0.019	90	1677127	60.0	61.0	
36 Chloroethane	64	2.740	2.756	-0.016	100	1175653	60.0	58.3	
37 Dichlorodifluoromethane	67	2.932	2.930	0.002	99	4651419	60.0	63.6	
38 Trichlorodifluoromethane	101	2.984	2.982	0.002	100	4149850	60.0	63.5	
40 Ethyl ether	59	3.228	3.226	0.002	94	946871	60.0	54.8	
44 Acrolein	56	3.367	3.365	0.002	99	670949	599.9	563.7	
45 1,1-Dichloroethene	96	3.471	3.470	0.001	94	1917053	60.0	59.0	
46 1,1,2-Trichloro-1,2,2-trif	151	3.489	3.487	0.002	98	2715137	60.0	61.3	
47 Acetone	43	3.506	3.505	0.001	97	674850	240.0	199.2	
48 Iodomethane	142	3.645	3.644	0.001	99	4302574	60.0	58.8	
50 Carbon disulfide	76	3.715	3.731	-0.016	100	7290483	60.0	58.1	
52 3-Chloro-1-propene	41	3.819	3.818	0.001	91	4311947	60.0	57.1	
53 Methyl acetate	43	3.837	3.818	0.019	99	3085396	300.0	281.3	
54 Methylene Chloride	84	3.941	3.957	-0.016	98	1594879	60.0	57.5	
55 2-Methyl-2-propanol	59	4.081	4.062	0.019	96	530360	600.0	596.2	
57 Acrylonitrile	53	4.202	4.201	0.001	98	1661461	600.0	585.7	
58 trans-1,2-Dichloroethene	96	4.237	4.236	0.001	95	2163767	60.0	59.2	
56 Methyl tert-butyl ether	73	4.237	4.236	0.001	99	3405326	60.0	54.9	
59 Hexane	57	4.498	4.514	-0.016	95	4048497	60.0	65.0	
60 1,1-Dichloroethane	63	4.690	4.688	0.002	96	4517987	60.0	58.5	
61 Vinyl acetate	43	4.725	4.723	0.002	96	5740935	120.0	120.0	
65 cis-1,2-Dichloroethene	96	5.369	5.367	0.002	88	2172564	60.0	58.9	
67 2-Butanone (MEK)	43	5.369	5.367	0.002	95	1491424	240.0	238.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.369	5.385	-0.016	91	3826816	60.0	59.4	
71 sec-Butyl Alcohol	45	5.578	5.576	0.002	96	2256681	1800.0	1660.4	
73 Chlorobromomethane	128	5.647	5.663	-0.016	90	966337	60.0	59.7	
74 Tetrahydrofuran	42	5.717	5.716	0.001	95	502514	120.0	111.8	
75 Chloroform	83	5.735	5.733	0.001	97	4188258	60.0	58.1	
76 1,1,1-Trichloroethane	97	5.978	5.977	0.001	97	4170262	60.0	60.5	
77 Cyclohexane	56	6.048	6.046	0.002	97	4600736	60.0	60.5	
78 1,1-Dichloropropene	75	6.170	6.168	0.002	92	3571391	60.0	57.8	
79 Carbon tetrachloride	117	6.187	6.186	0.001	98	3967597	60.0	62.0	
80 Isobutyl alcohol	41	6.292	6.290	0.002	92	692521	1500.0	1454.7	
81 Benzene	78	6.431	6.429	0.002	97	6903972	60.0	60.5	
82 1,2-Dichloroethane	62	6.448	6.447	0.001	96	1932916	60.0	56.1	
84 n-Heptane	43	6.727	6.725	0.002	97	6112060	60.0	60.5	
86 Trichloroethene	95	7.249	7.230	0.019	97	2854202	60.0	61.5	
88 2-Pentanone	43	7.475	7.474	0.001	96	3833019	240.0	221.2	
89 Methylcyclohexane	55	7.510	7.491	0.019	91	4186466	60.0	61.8	
90 1,2-Dichloropropane	63	7.545	7.526	0.019	96	2580688	60.0	56.6	
92 Dibromomethane	93	7.702	7.700	0.002	95	1255247	60.0	55.3	
93 1,4-Dioxane	88	7.719	7.718	0.001	81	154119	1200.0	1139.8	
94 Dichlorobromomethane	83	7.893	7.892	0.001	98	3971466	60.0	59.9	
96 2-Chloroethyl vinyl ether	63	8.294	8.292	0.002	88	539090	60.0	66.2	
97 cis-1,3-Dichloropropene	75	8.503	8.501	0.002	91	3329041	60.0	60.9	
98 4-Methyl-2-pentanone (MIBK)	43	8.729	8.710	0.019	97	5332900	240.0	230.1	
99 Toluene	91	8.973	8.971	0.002	97	7745216	60.0	59.2	
100 trans-1,3-Dichloropropene	75	9.286	9.285	0.001	98	2363176	60.0	56.6	
101 Ethyl methacrylate	69	9.408	9.406	0.002	95	1969555	60.0	58.7	
102 1,1,2-Trichloroethane	97	9.547	9.546	0.001	92	1387307	60.0	53.0	
103 Tetrachloroethene	164	9.774	9.772	0.002	96	2470886	60.0	65.4	
104 1,3-Dichloropropane	76	9.791	9.789	0.002	97	2453301	60.0	57.6	
105 2-Hexanone	43	9.930	9.929	0.001	98	3687649	240.0	236.7	
108 Chlorodibromomethane	129	10.157	10.155	0.002	91	2532153	60.0	61.1	
109 Ethylene Dibromide	107	10.331	10.329	0.002	98	1794214	60.0	61.4	
110 1-Chlorohexane	91	11.114	11.113	0.001	90	3982029	60.0	62.4	
111 Chlorobenzene	112	11.149	11.147	0.002	90	5169847	60.0	62.1	
112 1,1,2-Tetrachloroethane	131	11.288	11.287	0.001	96	2510665	60.0	62.5	
113 Ethylbenzene	106	11.323	11.322	0.001	99	2674714	60.0	63.0	
114 m-Xylene & p-Xylene	106	11.514	11.496	0.018	98	3670522	60.0	63.6	
115 o-Xylene	106	12.072	12.070	0.002	98	3193493	60.0	63.1	
116 Styrene	104	12.089	12.088	0.001	93	5159432	60.0	63.0	
117 Bromoform	173	12.350	12.349	0.001	94	1411916	60.0	63.1	
118 Isopropylbenzene	105	12.559	12.558	0.001	96	10313550	60.0	58.8	
120 Cyclohexanone	55	12.698	12.697	0.001	97	1194077	2400.0	2315.6	
122 Bromobenzene	156	12.942	12.941	0.001	95	2406376	60.0	59.5	
121 1,1,2,2-Tetrachloroethane	83	12.959	12.958	0.001	94	1907715	60.0	52.2	
123 1,2,3-Trichloropropane	110	13.012	12.993	0.019	80	434508	60.0	50.9	
124 trans-1,4-Dichloro-2-butene	53	13.029	13.028	0.001	82	486849	60.0	50.8	
125 N-Propylbenzene	120	13.081	13.080	0.001	99	2510741	60.0	58.5	
126 2-Chlorotoluene	126	13.186	13.184	0.002	95	1941695	60.0	58.3	
127 1,3,5-Trimethylbenzene	105	13.308	13.289	0.019	95	7739677	60.0	58.3	
128 4-Chlorotoluene	126	13.325	13.306	0.019	98	2561711	60.0	59.6	
129 tert-Butylbenzene	119	13.673	13.672	0.001	95	8377315	60.0	58.2	
130 1,2,4-Trimethylbenzene	105	13.726	13.724	0.002	95	7231176	60.0	57.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.917	13.916	0.001	95	2264838	60.0	59.6	
132 1,3-Dichlorobenzene	146	14.039	14.037	0.002	97	3660427	60.0	59.6	
133 4-Isopropyltoluene	119	14.091	14.072	0.019	98	9779012	60.0	59.8	
134 1,4-Dichlorobenzene	146	14.143	14.142	0.001	95	5532730	60.0	58.3	
137 n-Butylbenzene	91	14.509	14.507	0.002	99	10123491	60.0	59.0	
138 1,2-Dichlorobenzene	146	14.544	14.542	0.002	97	3820213	60.0	59.2	
139 1,2-Dibromo-3-Chloropropan	157	15.310	15.326	-0.016	82	349881	60.0	58.1	
141 1,2,4-Trichlorobenzene	180	16.076	16.074	0.002	94	2675409	60.0	61.7	a
142 Hexachlorobutadiene	225	16.232	16.231	0.001	97	2743229	60.0	60.7	
143 Naphthalene	128	16.302	16.301	0.001	97	2893523	60.0	58.7	
144 1,2,3-Trichlorobenzene	180	16.528	16.527	0.001	93	2079040	60.0	60.9	a
S 151 1,2-Dichloroethene, Total	96				0		120.0	118.1	
S 145 Trihalomethanes, Total	1				0		240.0	242.2	
S 146 Xylenes, Total (URS)	1				0		120.0	126.7	
S 147 Total BTEX	1				0			309.5	
S 148 1,3-Dichloropropene, Total	1				0		120.0	117.5	
S 149 1,2-Dichloroethene, Total	1				0		120.0	118.1	
S 150 Xylenes, Total	106				0		120.0	126.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 30.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 30.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 30.00	Units: uL

Report Date: 02-Jun-2015 08:05:05

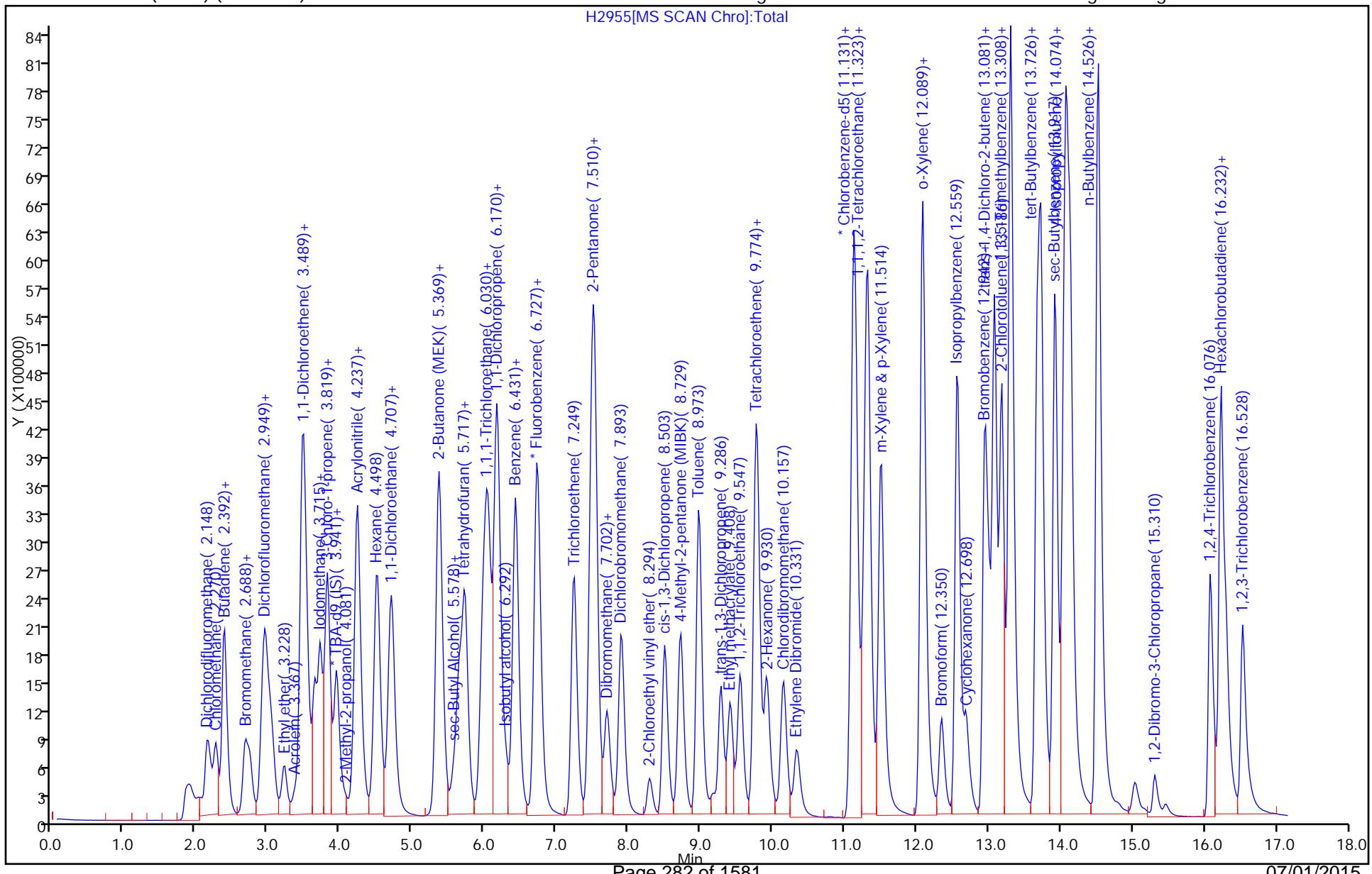
Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2955.D
 Injection Date: 28-May-2015 02:33:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: BERGERB
 Worklist Smp#: 15

ALS Bottle#: 9



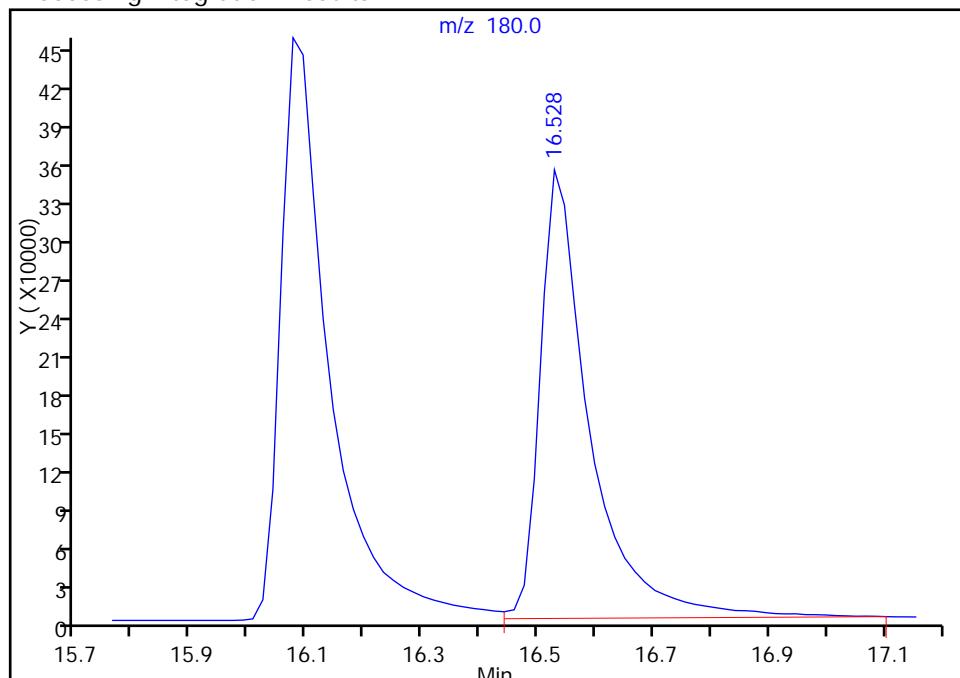
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2955.D
 Injection Date: 28-May-2015 02:33:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 9 Worklist Smp#: 15
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

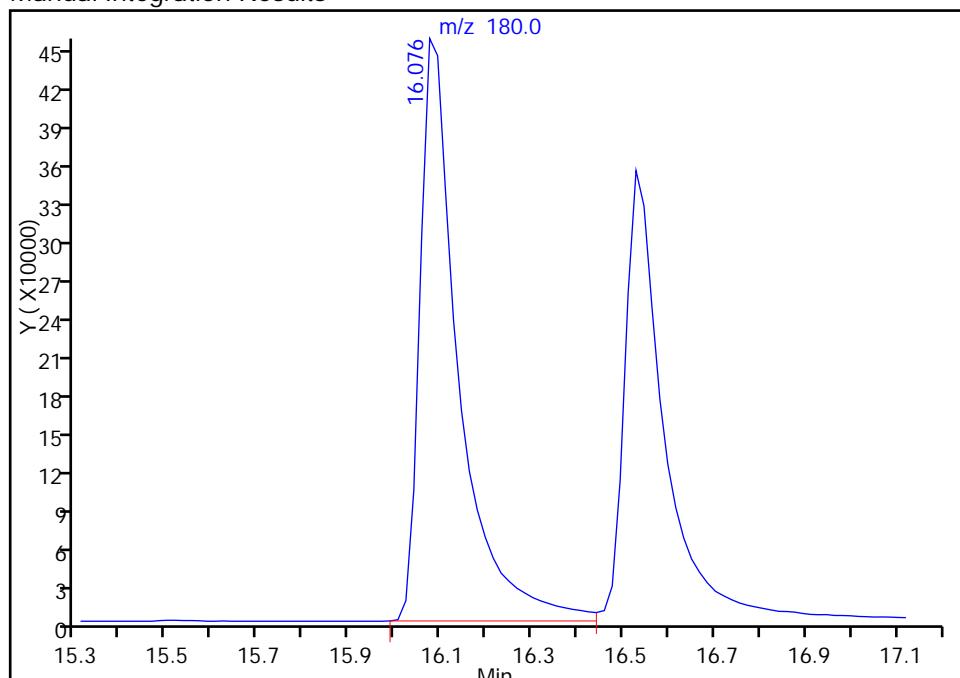
RT: 16.53
 Area: 2079040
 Amount: 49.604181
 Amount Units: ug/l

Processing Integration Results



RT: 16.08
 Area: 2675409
 Amount: 61.741363
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:05:05

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

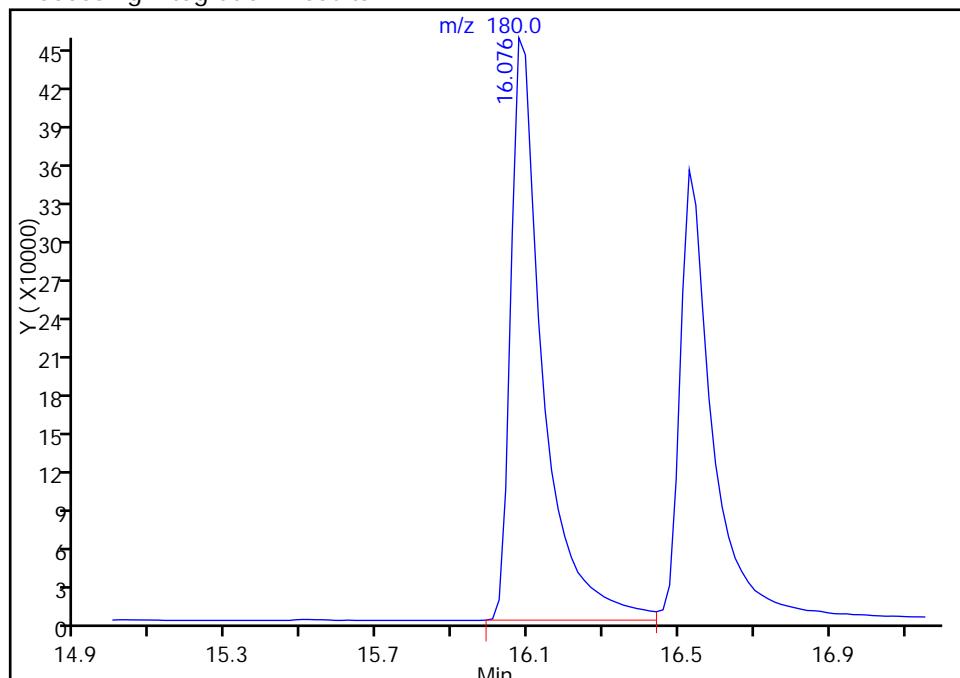
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2955.D
 Injection Date: 28-May-2015 02:33:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 9 Worklist Smp#: 15
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

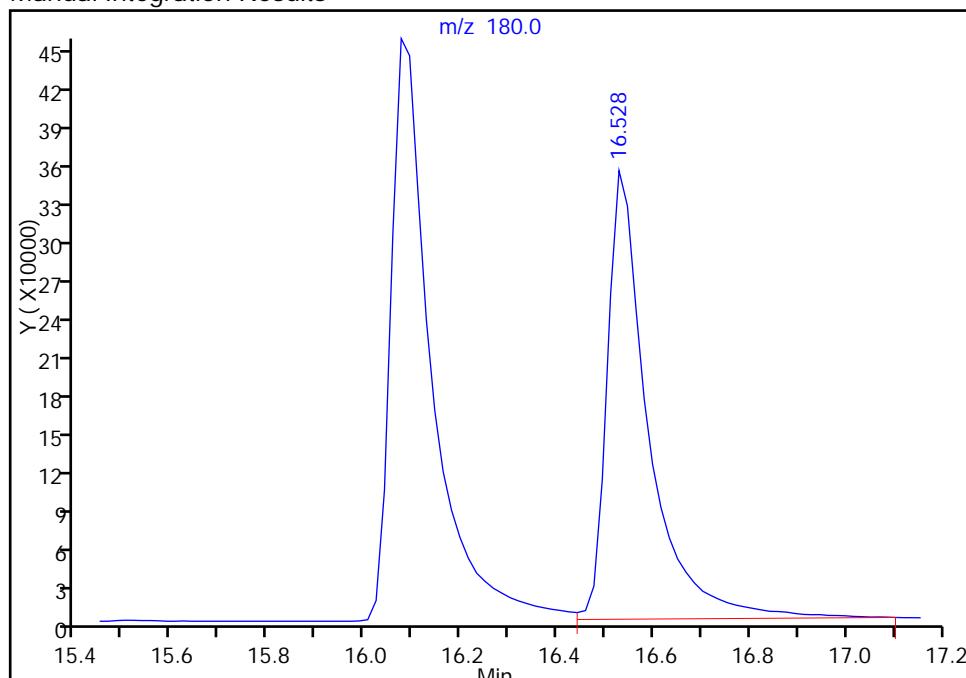
RT: 16.08
 Area: 2675409
 Amount: 75.259408
 Amount Units: ug/l

Processing Integration Results



RT: 16.53
 Area: 2079040
 Amount: 60.916685
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:05:05

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2957.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 28-May-2015 03:18:30 ALS Bottle#: 11 Worklist Smp#: 16
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99

Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:17 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt Date: 28-May-2015 06:47:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.973	3.975	-0.002	99	223130	250.0	250.0	
* 2 Fluorobenzene	96	6.759	6.760	-0.001	97	1100257	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.111	11.113	-0.002	93	260705	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.123	14.107	0.016	98	399090	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.923	5.924	-0.001	93	62835	1.00	1.13	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.341	6.342	-0.001	83	33456	1.00	1.09	
\$ 10 Toluene-d8 (Surr)	98	8.883	8.883	-0.001	95	134275	1.00	1.06	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.765	12.766	-0.001	81	81659	1.00	1.20	
34 Ethylene oxide	43	2.650	2.633	0.017	99	108123	200.0	200.2	
39 Ethanol	45		3.156				ND	ND	
43 Propene oxide	58	3.311	3.295	0.016	95	106179	50.0	51.5	
49 Isopropyl alcohol	45	3.642	3.626	0.016	36	10503	10.0	13.7	
51 Acetonitrile	41	3.799	3.817	-0.018	71	16071	12.5	15.3	M
62 Isopropyl ether	87	4.756	4.757	-0.001	99	33342	1.25	1.31	
63 2-Chloro-1,3-butadiene	53	4.791	4.792	-0.001	92	61627	1.00	1.06	
64 Tert-butyl ethyl ether	59	5.174	5.175	-0.001	99	153824	1.25	1.49	
69 Ethyl acetate	43	5.435	5.419	0.016	95	30591	2.00	2.19	
70 Propionitrile	54	5.470	5.454	0.016	46	13113	12.5	13.2	
72 Methacrylonitrile	41	5.627	5.610	0.017	97	88804	10.0	10.2	
83 Tert-amyl methyl ether	73	6.550	6.551	0.000	97	108283	1.25	1.33	
85 n-Butanol	56	7.159	7.160	-0.001	84	6625	25.0	22.8	
87 Ethyl acrylate	55	7.368	7.351	0.017	0	20390	NC	NC	
91 Methyl methacrylate	100	7.681	7.665	0.016	94	11608	2.00	2.38	
95 2-Nitropropane	41	8.186	8.187	-0.001	96	7254	2.00	2.01	
107 Tetrahydrothiophene	60	10.136	10.119	0.017	59	11131	1.00	0.99	
119 cis-1,4-Dichloro-2-butene	53	12.660	12.661	-0.001	82	5565	1.00	0.7918	
135 1,2,3-Trimethylbenzene	105	14.192	14.193	-0.001	97	111761	1.00	1.05	
140 1,3,5-Trichlorobenzene	180	15.516	15.516	0.000	95	54832	1.00	1.04	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-568718-D_00002 Amount Added: 1.00 Units: uL

MV-Supp A_00011 Amount Added: 0.50 Units: uL

MV-ARCH SS A_00042 Amount Added: 0.08 Units: uL

Report Date: 28-May-2015 07:24:17

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2957.D

Injection Date: 28-May-2015 03:18:30

Instrument ID: VMS_H

Lims ID: ic

Operator ID: BERGERB

Client ID:

Worklist Smp#: 16

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

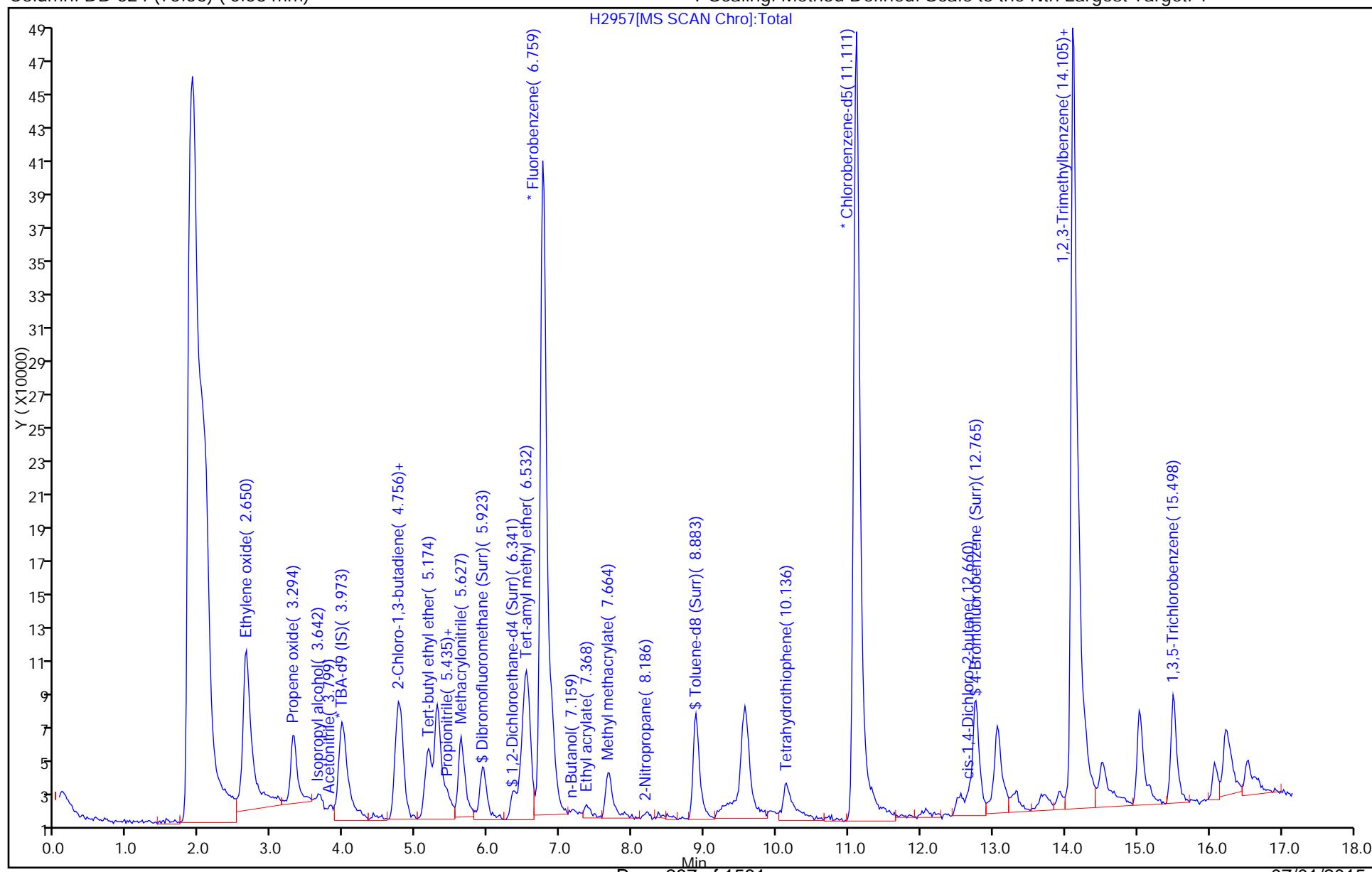
ALS Bottle#: 11

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



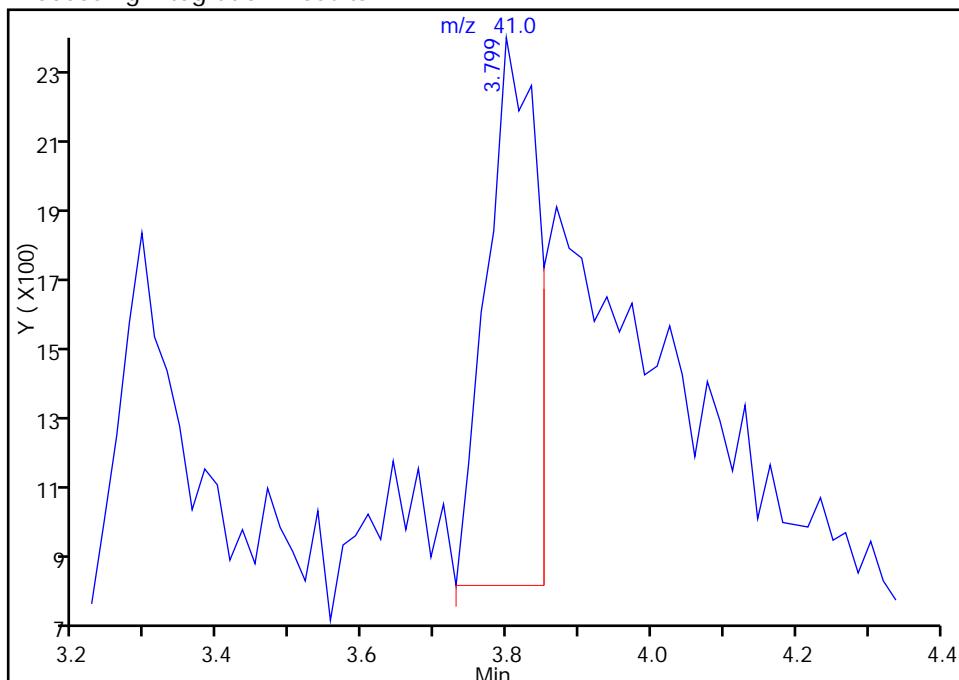
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2957.D
 Injection Date: 28-May-2015 03:18:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 11 Worklist Smp#: 16
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

51 Acetonitrile, CAS: 75-05-8

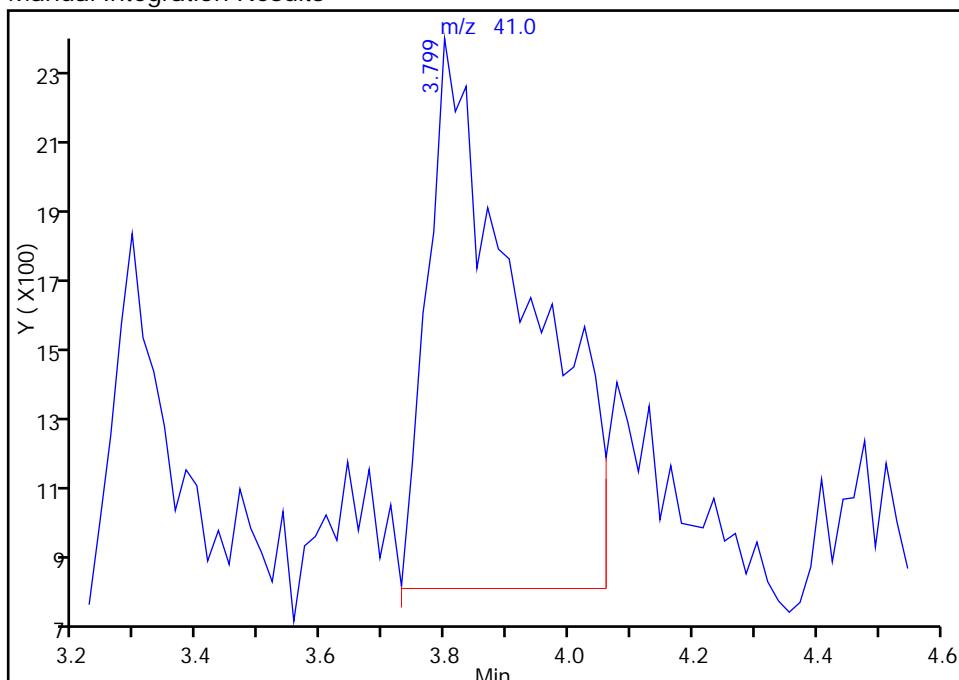
RT: 3.80
 Area: 7181
 Amount: 10.938454
 Amount Units: ug/l

Processing Integration Results



RT: 3.80
 Area: 16071
 Amount: 15.289027
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:50:57

Audit Action: Assigned New Baseline

Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2958.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 28-May-2015 03:40:30 ALS Bottle#: 12 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:18 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt Date: 28-May-2015 06:47:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.987	3.975	0.012	99	199012	250.0	250.0	
* 2 Fluorobenzene	96	6.755	6.760	-0.005	97	1109205	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.108	11.113	-0.005	93	253043	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.107	0.013	98	394410	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.920	5.924	-0.004	93	118288	2.00	2.11	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.355	6.342	0.013	83	66325	2.00	2.14	
\$ 10 Toluene-d8 (Surr)	98	8.879	8.883	-0.004	94	255016	2.00	2.07	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.762	12.766	-0.004	81	142343	2.00	2.11	
34 Ethylene oxide	43	2.647	2.633	0.014	99	206562	400.0	379.3	
39 Ethanol	45	3.169	3.156	0.013	45	9004	100.0	104.6	M
43 Propene oxide	58	3.308	3.295	0.013	95	198005	100.0	95.2	
49 Isopropyl alcohol	45	3.639	3.626	0.013	30	10028	20.0	12.6	
51 Acetonitrile	41	3.848	3.817	0.031	94	19392	25.0	20.5	M
62 Isopropyl ether	87	4.753	4.757	-0.004	99	64479	2.50	2.51	
63 2-Chloro-1,3-butadiene	53	4.788	4.792	-0.004	92	115265	2.00	1.97	
64 Tert-butyl ethyl ether	59	5.171	5.175	-0.004	99	264567	2.50	2.54	
69 Ethyl acetate	43	5.415	5.419	-0.004	96	50291	4.00	3.57	
70 Propionitrile	54	5.450	5.454	-0.004	32	23893	25.0	23.8	
72 Methacrylonitrile	41	5.624	5.610	0.014	97	173321	20.0	19.7	
83 Tert-amyl methyl ether	73	6.564	6.551	0.014	96	203262	2.50	2.48	
85 n-Butanol	56	7.156	7.160	-0.004	91	13826	50.0	47.2	
87 Ethyl acrylate	55	7.347	7.351	-0.004	0	47247	NC	NC	
91 Methyl methacrylate	100	7.661	7.665	-0.004	95	20939	4.00	4.26	
95 2-Nitropropane	41	8.200	8.187	0.013	96	13786	4.00	3.80	
107 Tetrahydrothiophene	60	10.133	10.119	0.014	59	22027	2.00	2.02	
119 cis-1,4-Dichloro-2-butene	53	12.657	12.661	-0.004	94	15634	2.00	2.25	
135 1,2,3-Trimethylbenzene	105	14.189	14.193	-0.004	97	209412	2.00	1.98	
140 1,3,5-Trichlorobenzene	180	15.512	15.516	-0.004	96	105315	2.00	2.03	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Supp A_00011	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 0.16	Units: uL

Report Date: 28-May-2015 07:24:18

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2958.D

Injection Date: 28-May-2015 03:40:30

Instrument ID: VMS_H

Lims ID: ic

Operator ID: BERGERB

Client ID:

Worklist Smp#: 17

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

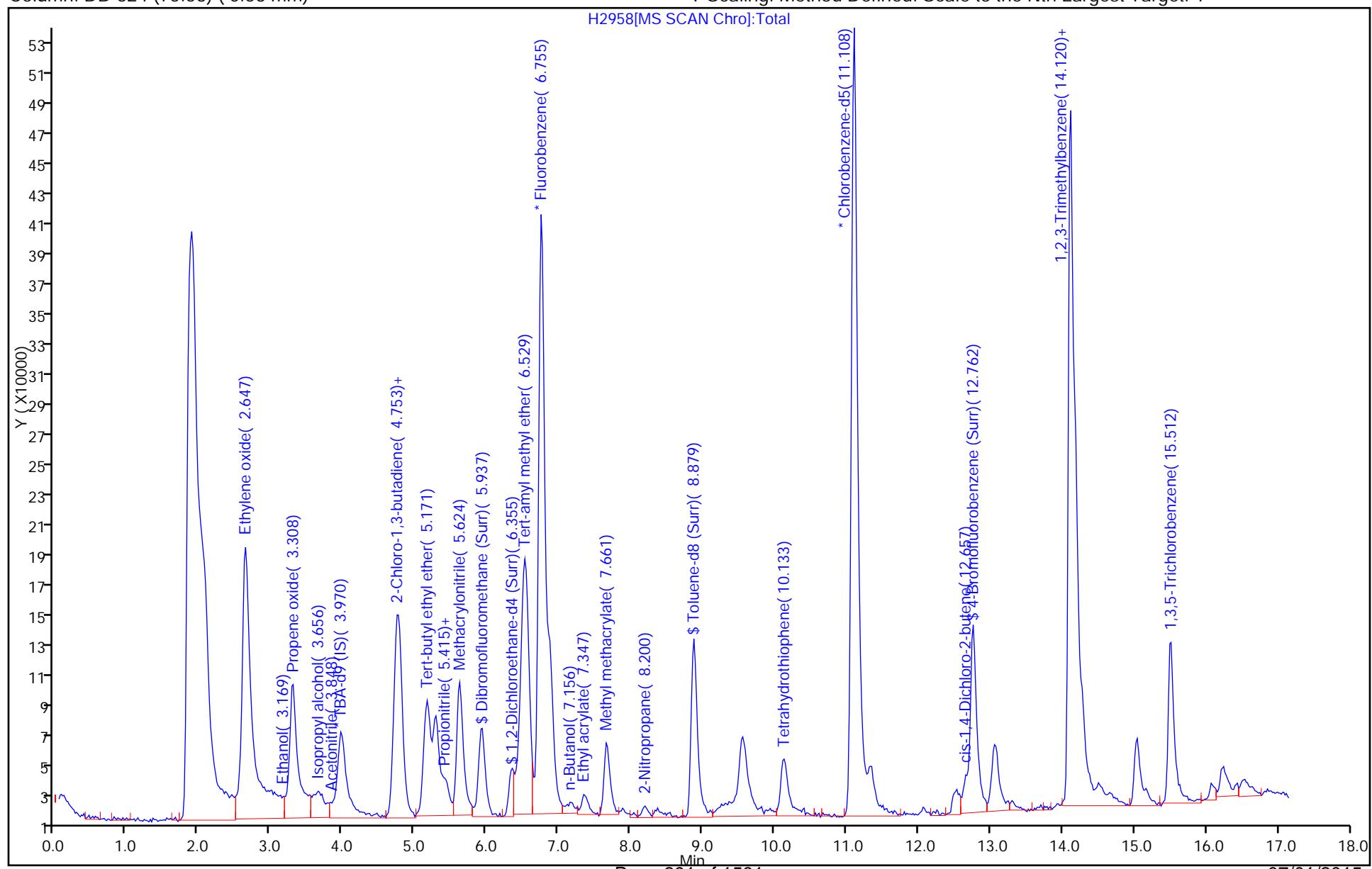
ALS Bottle#: 12

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



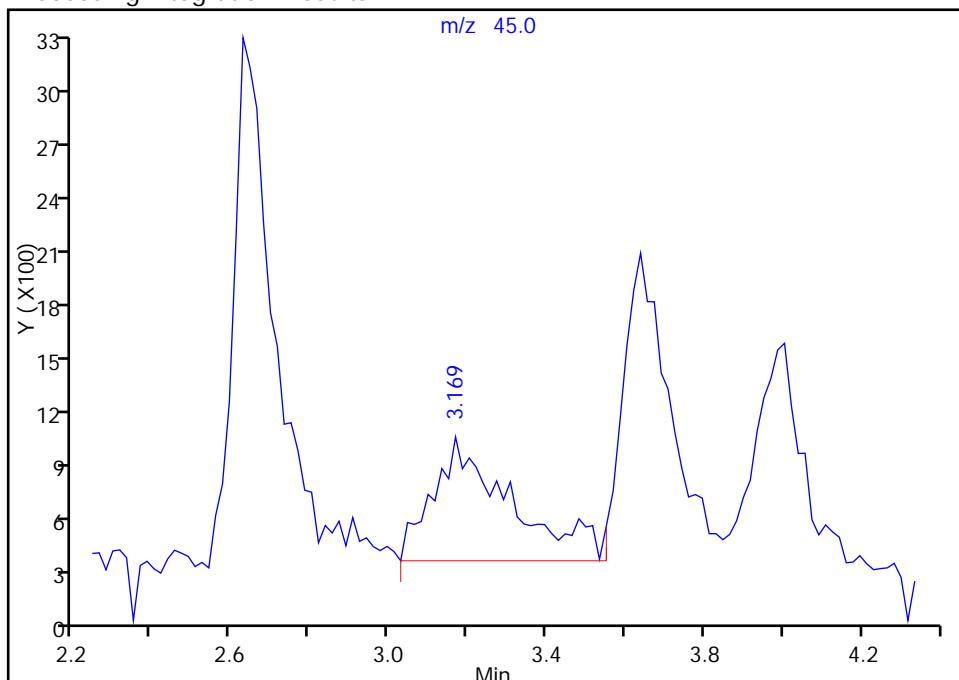
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2958.D
 Injection Date: 28-May-2015 03:40:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 12 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

39 Ethanol, CAS: 64-17-5

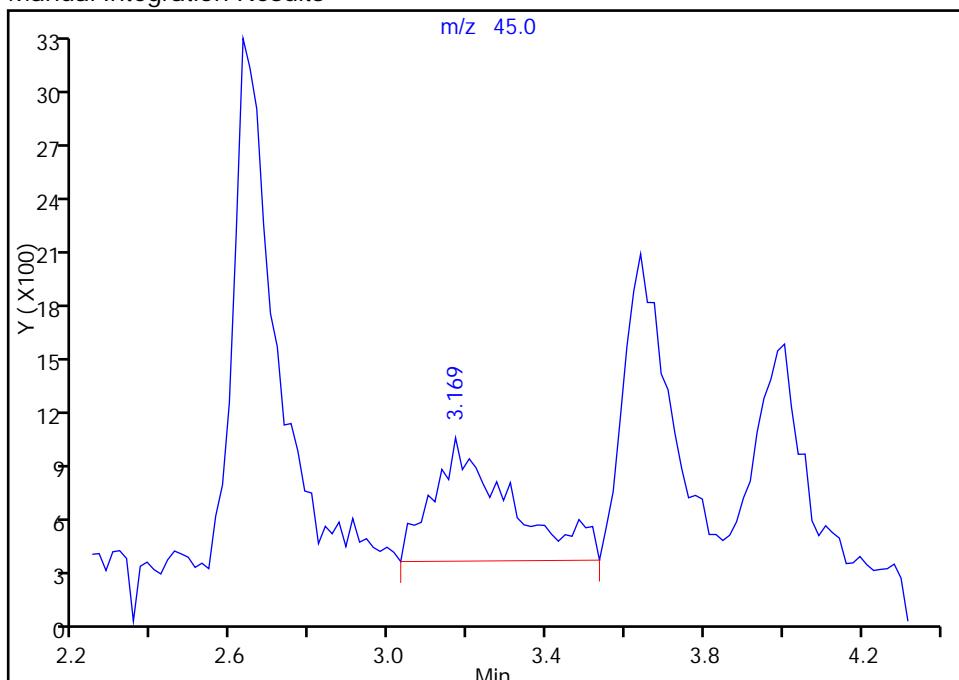
RT: 3.17
 Area: 9329
 Amount: 131.4277
 Amount Units: ug/l

Processing Integration Results



RT: 3.17
 Area: 9004
 Amount: 104.5561
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:52:50

Audit Action: Manually Integrated

Audit Reason: Shouldering

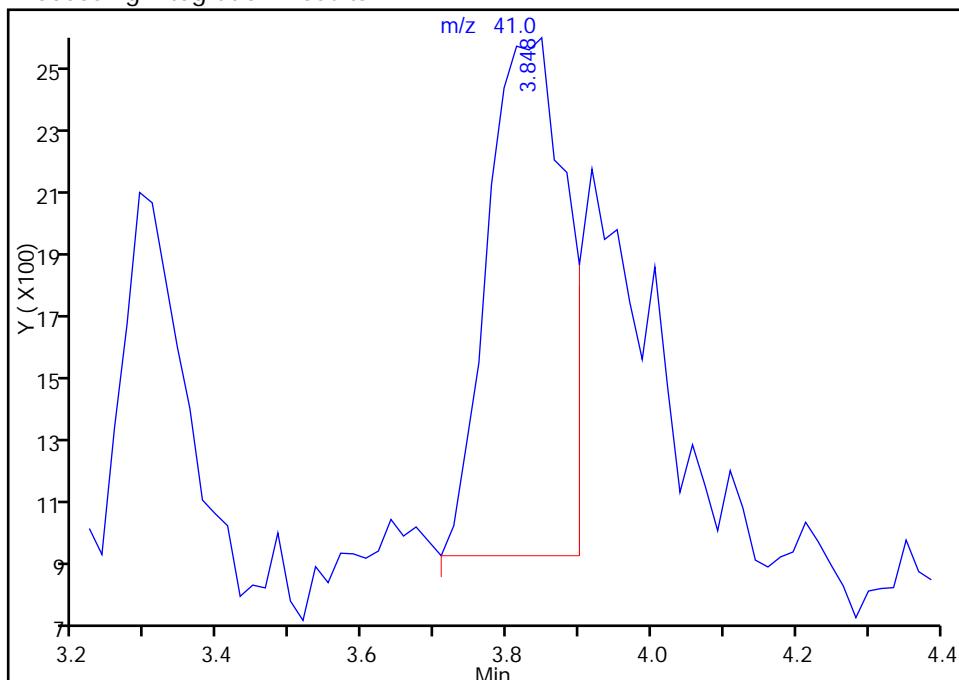
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2958.D
 Injection Date: 28-May-2015 03:40:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 12 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

51 Acetonitrile, CAS: 75-05-8

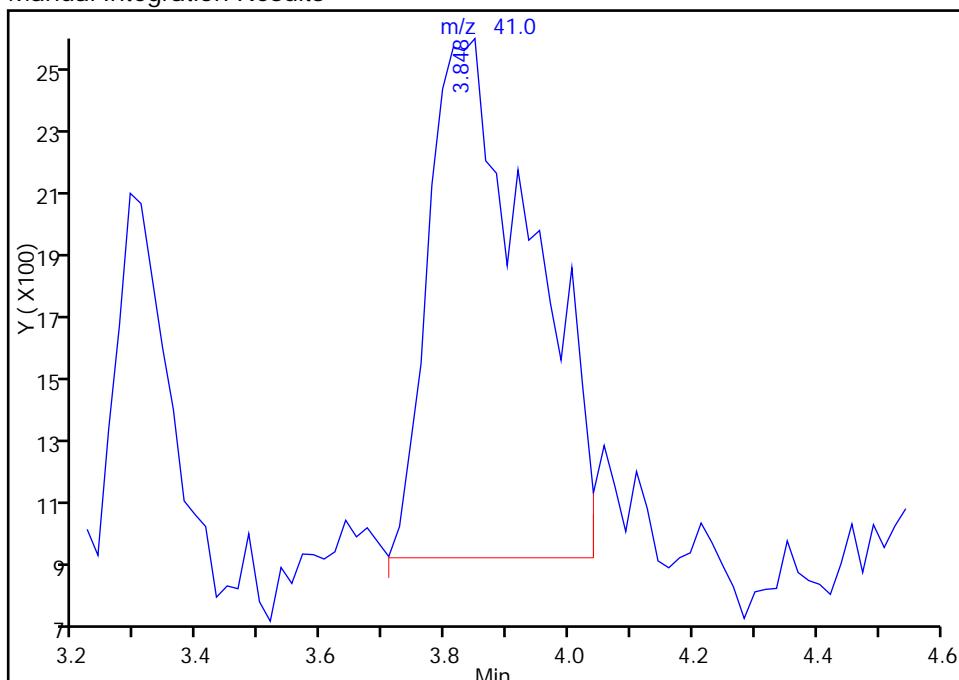
RT: 3.85
 Area: 12617
 Amount: 20.460101
 Amount Units: ug/l

Processing Integration Results



RT: 3.85
 Area: 19392
 Amount: 20.495260
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:50:33

Audit Action: Assigned New Baseline

Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2959.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 28-May-2015 04:03:30 ALS Bottle#: 13 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:19 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt

Date:

28-May-2015 06:48:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.988	3.975	0.013	99	193876	250.0	250.0	
* 2 Fluorobenzene	96	6.756	6.760	-0.004	97	1102662	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.108	11.113	-0.005	92	247579	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.107	0.013	97	386847	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.920	5.924	-0.004	92	266180	5.00	4.78	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.338	6.342	-0.004	83	149069	5.00	4.83	
\$ 10 Toluene-d8 (Surr)	98	8.880	8.883	-0.003	95	582345	5.00	4.82	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.762	12.766	-0.004	81	317561	5.00	4.80	
34 Ethylene oxide	43	2.647	2.633	0.014	99	544994	1000.0	1006.8	
39 Ethanol	45	3.187	3.156	0.031	95	15621	250.0	216.2	M
43 Propene oxide	58	3.309	3.295	0.014	95	506300	250.0	244.9	
49 Isopropyl alcohol	45	3.657	3.626	0.031	95	24803	50.0	42.1	
51 Acetonitrile	41	3.796	3.817	-0.021	100	43880	62.5	60.9	
62 Isopropyl ether	87	4.736	4.757	-0.021	98	158619	6.25	6.21	
63 2-Chloro-1,3-butadiene	53	4.788	4.792	-0.004	92	294842	5.00	5.07	
64 Tert-butyl ethyl ether	59	5.171	5.175	-0.004	99	620642	6.25	6.00	
69 Ethyl acetate	43	5.415	5.419	-0.004	99	133601	10.0	9.55	
70 Propionitrile	54	5.450	5.454	-0.004	96	61262	62.5	61.5	
72 Methacrylonitrile	41	5.624	5.610	0.014	97	426154	50.0	48.8	
83 Tert-amyl methyl ether	73	6.547	6.551	-0.003	97	509379	6.25	6.25	
85 n-Butanol	56	7.156	7.160	-0.004	90	32899	125.0	113.0	
87 Ethyl acrylate	55	7.365	7.351	0.014	0	115703	NC	NC	
91 Methyl methacrylate	100	7.678	7.665	0.013	95	46363	10.0	9.48	
95 2-Nitropropane	41	8.201	8.187	0.014	96	34617	10.0	9.59	
107 Tetrahydrothiophene	60	10.133	10.119	0.014	59	52424	5.00	4.92	
119 cis-1,4-Dichloro-2-butene	53	12.640	12.661	-0.021	93	35995	5.00	5.28	
135 1,2,3-Trimethylbenzene	105	14.190	14.193	-0.003	98	519679	5.00	5.02	
140 1,3,5-Trichlorobenzene	180	15.513	15.516	-0.003	96	251792	5.00	4.94	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

MV-568718-D_00002

Amount Added: 1.00 Units: uL

MV-Supp A_00011

Amount Added: 2.50 Units: uL

MV-ARCH SS A_00042

Amount Added: 0.40 Units: uL

Report Date: 28-May-2015 07:24:19

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2959.D

Injection Date: 28-May-2015 04:03:30

Instrument ID: VMS_H

Lims ID: ic

Operator ID: BERGERB

Client ID:

Worklist Smp#: 18

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

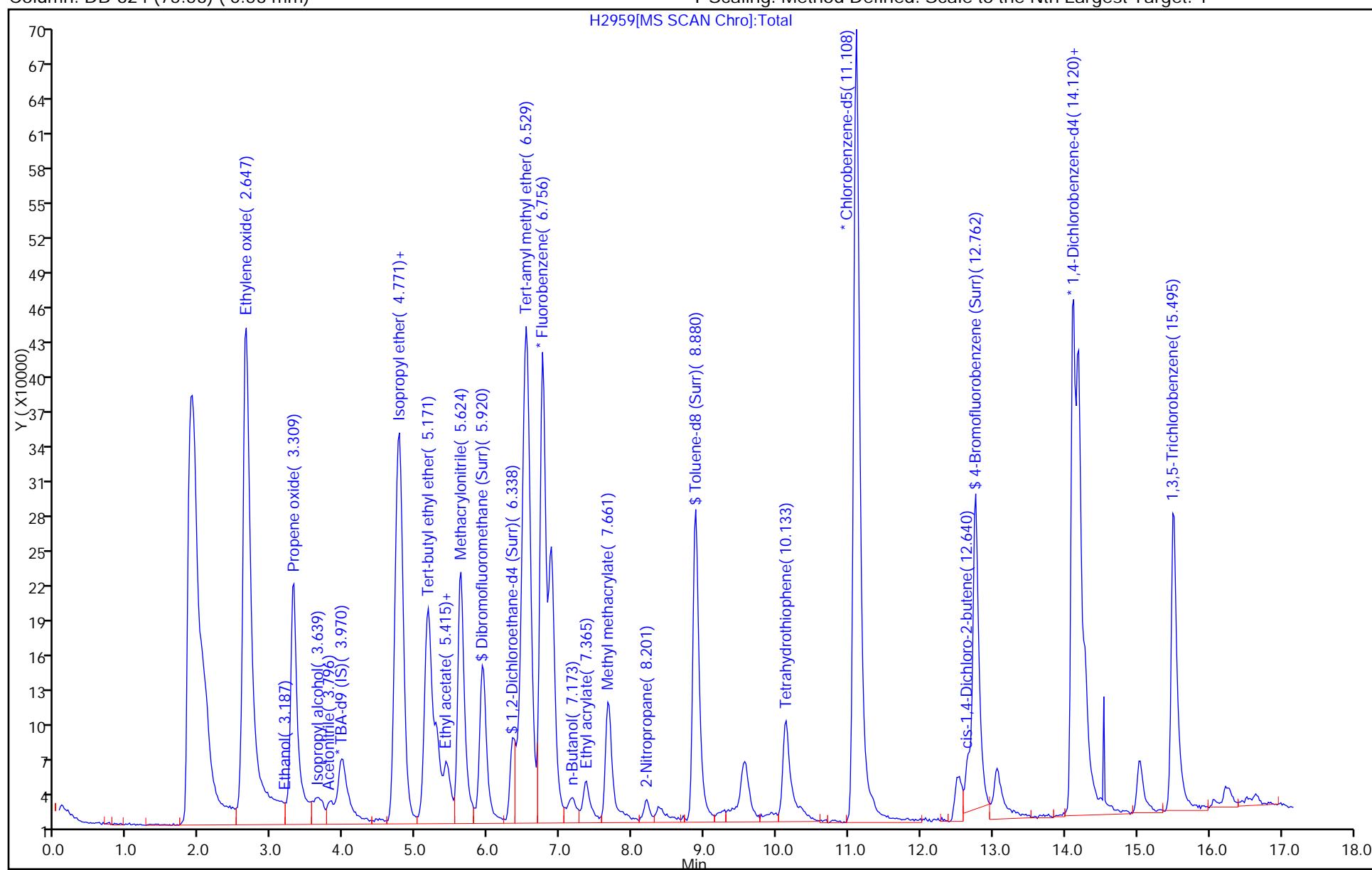
ALS Bottle#: 13

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



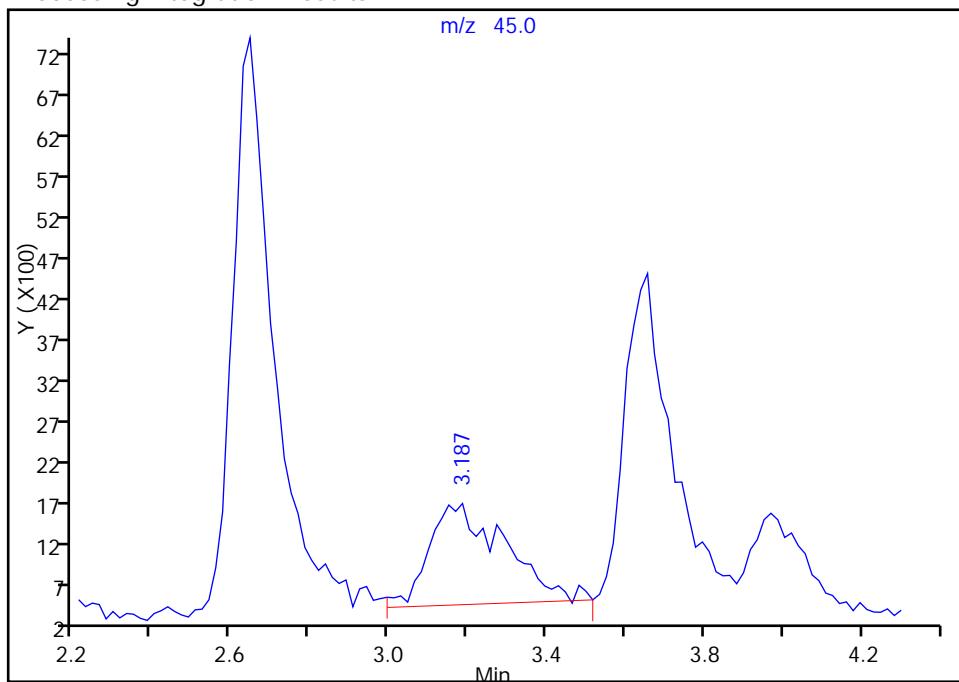
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2959.D
 Injection Date: 28-May-2015 04:03:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 13 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

39 Ethanol, CAS: 64-17-5

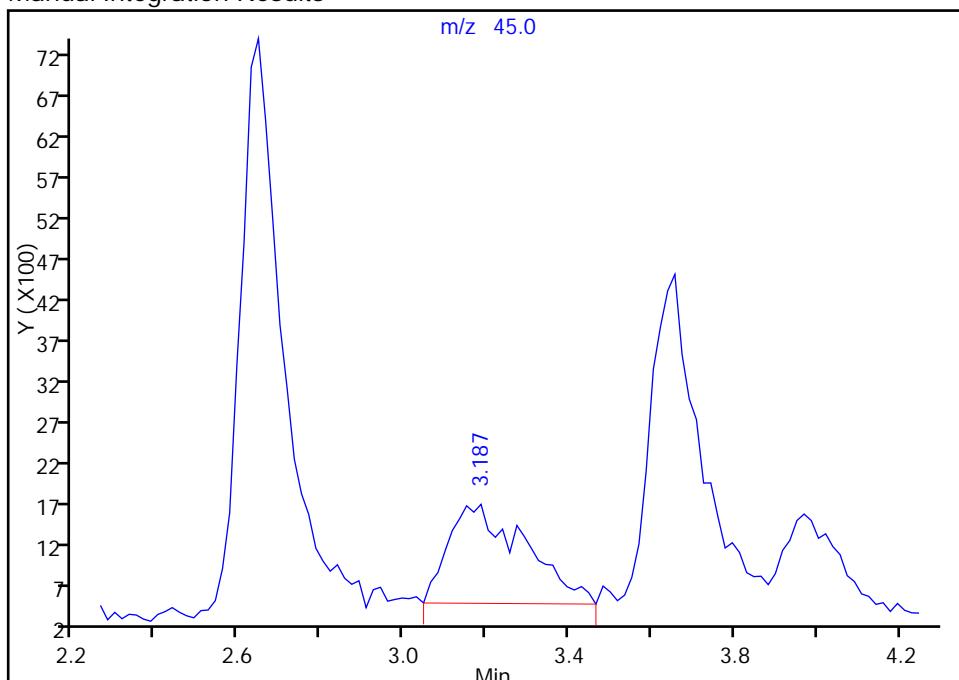
RT: 3.19
 Area: 16621
 Amount: 245.7684
 Amount Units: ug/l

Processing Integration Results



RT: 3.19
 Area: 15621
 Amount: 216.1921
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:52:31

Audit Action: Manually Integrated

Audit Reason: Shouldering

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2960.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 28-May-2015 04:25:30 ALS Bottle#: 14 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: icis
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:20 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt

Date:

28-May-2015 06:46:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.974	3.974	0.000	100	211144	250.0	250.0	
* 2 Fluorobenzene	96	6.759	6.759	0.000	98	1108417	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.094	11.094	0.000	93	256513	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.106	14.106	0.000	98	390191	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.924	5.924	0.000	93	546393	10.0	9.76	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.342	6.342	0.000	83	308839	10.0	9.96	
\$ 10 Toluene-d8 (Surr)	98	8.883	8.883	0.000	95	1177961	10.0	9.41	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.766	12.766	0.000	81	618356	10.0	9.26	
34 Ethylene oxide	43	2.633	2.633	0.000	99	1164009	2000.0	2139.2	
39 Ethanol	45	3.156	3.156	0.000	91	33859	500.0	518.5	
43 Propene oxide	58	3.295	3.295	0.000	95	1107446	500.0	533.0	
49 Isopropyl alcohol	45	3.626	3.626	0.000	95	62543	100.0	116.5	
51 Acetonitrile	41	3.817	3.817	0.000	99	81258	125.0	121.5	
62 Isopropyl ether	87	4.757	4.757	0.000	98	324780	12.5	12.7	
63 2-Chloro-1,3-butadiene	53	4.792	4.792	0.000	92	570915	10.0	9.76	
64 Tert-butyl ethyl ether	59	5.175	5.175	0.000	99	1272766	12.5	12.2	
69 Ethyl acetate	43	5.419	5.419	0.000	99	308502	20.0	21.9	
70 Propionitrile	54	5.454	5.454	0.000	98	130541	125.0	130.3	
72 Methacrylonitrile	41	5.610	5.610	0.000	97	925891	100.0	105.4	
83 Tert-amyl methyl ether	73	6.551	6.551	0.000	97	1058840	12.5	12.9	
85 n-Butanol	56	7.160	7.160	0.000	93	80688	250.0	275.7	
87 Ethyl acrylate	55	7.351	7.351	0.000	0	237833	NC	NC	
91 Methyl methacrylate	100	7.665	7.665	0.000	96	94799	20.0	19.3	
95 2-Nitropropane	41	8.187	8.187	0.000	97	68670	20.0	18.9	
107 Tetrahydrothiophene	60	10.119	10.119	0.000	71	109788	10.0	9.94	
119 cis-1,4-Dichloro-2-butene	53	12.661	12.661	0.000	93	75289	10.0	11.0	
135 1,2,3-Trimethylbenzene	105	14.193	14.193	0.000	99	1016440	10.0	9.74	
140 1,3,5-Trichlorobenzene	180	15.516	15.516	0.000	96	490488	10.0	9.54	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Supp A_00011	Amount Added: 5.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 0.80	Units: uL

Report Date: 28-May-2015 07:24:21

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: TestAmerica Denver

Injection Date: 28-May-2015 04:25:30

Instrument ID: VMS_H

Operator ID: BERGERB

Lims ID: icis

Worklist Smp#: 19

Client ID:

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

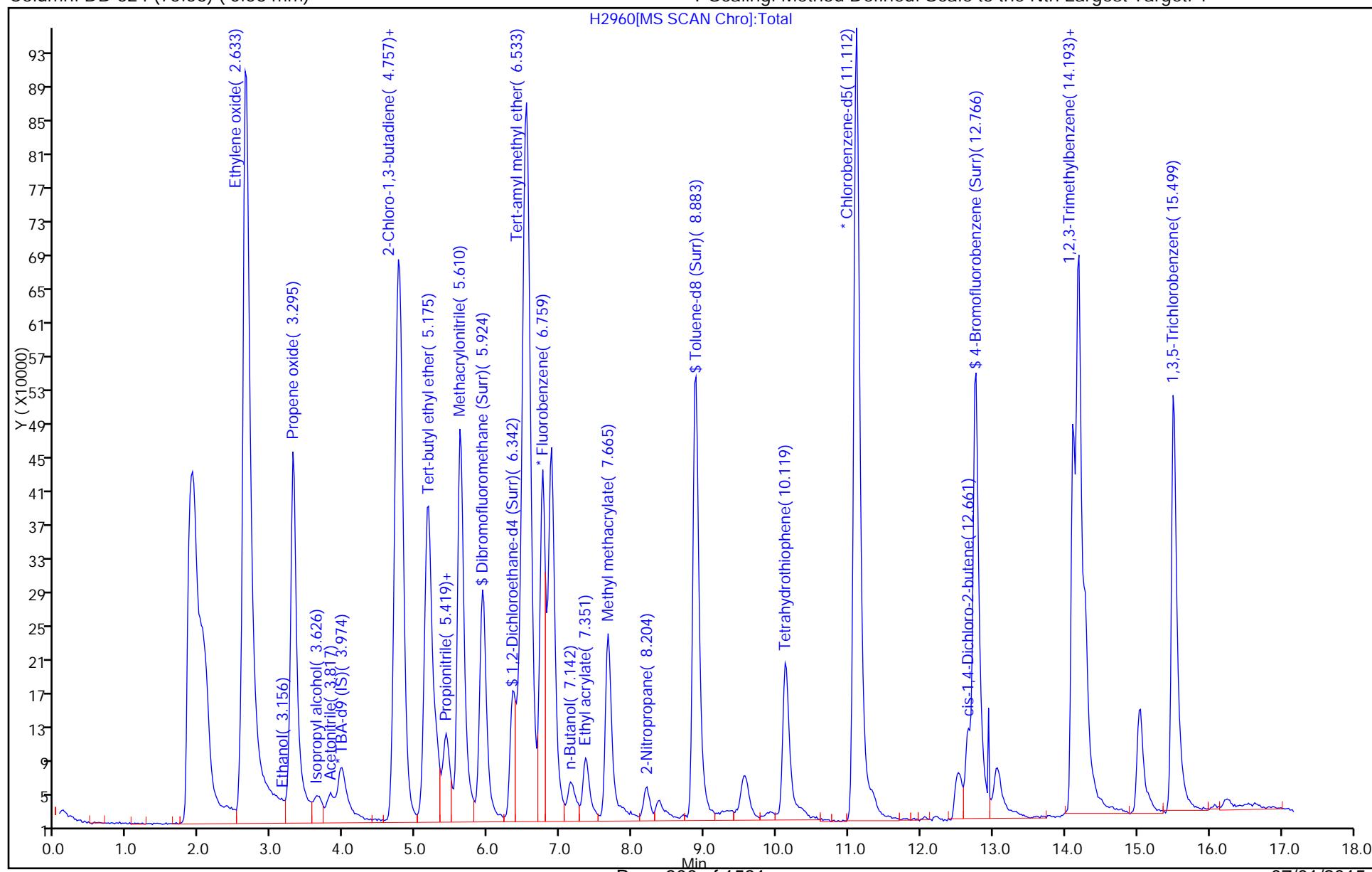
ALS Bottle#: 14

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2961.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 28-May-2015 04:48:30 ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:22 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt Date: 28-May-2015 06:49:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.975	3.974	0.001	99	193158	250.0	250.0	
* 2 Fluorobenzene	96	6.760	6.759	0.001	98	1119204	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.113	11.094	0.019	92	223366	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.107	14.106	0.001	98	396341	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.925	5.924	0.000	93	1592725	30.0	28.2	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.342	6.342	0.000	83	881719	30.0	28.2	
\$ 10 Toluene-d8 (Surr)	98	8.884	8.883	0.001	95	3504937	30.0	32.2	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.766	12.766	0.000	81	1920918	30.0	28.3	
34 Ethylene oxide	43	2.634	2.633	0.001	99	3313631	6000.0	6030.9	
39 Ethanol	45	3.122	3.156	-0.034	90	92015	1500.0	1472.0	
43 Propene oxide	58	3.296	3.295	0.001	95	3129672	1500.0	1491.7	
49 Isopropyl alcohol	45	3.626	3.626	0.000	45	156601	300.0	299.4	a
51 Acetonitrile	41	3.801	3.817	-0.016	97	239466	375.0	376.1	
62 Isopropyl ether	87	4.741	4.757	-0.016	99	949648	37.5	36.7	
63 2-Chloro-1,3-butadiene	53	4.793	4.792	0.001	92	1750155	30.0	29.6	
64 Tert-butyl ethyl ether	59	5.158	5.175	-0.017	99	3659958	37.5	34.8	
69 Ethyl acetate	43	5.402	5.419	-0.017	99	835914	60.0	58.9	
70 Propionitrile	54	5.437	5.454	-0.017	98	374048	375.0	369.8	
72 Methacrylonitrile	41	5.611	5.610	0.001	96	2645878	300.0	298.2	
83 Tert-amyl methyl ether	73	6.551	6.551	0.001	96	2980183	37.5	36.0	
85 n-Butanol	56	7.143	7.160	-0.017	94	237384	750.0	803.2	
87 Ethyl acrylate	55	7.352	7.351	0.001	0	693518	NC	NC	
91 Methyl methacrylate	100	7.665	7.665	0.000	95	277060	60.0	55.8	
95 2-Nitropropane	41	8.188	8.187	0.001	98	235853	60.0	64.4	
107 Tetrahydrothiophene	60	10.120	10.119	0.001	59	307294	30.0	31.9	
119 cis-1,4-Dichloro-2-butene	53	12.662	12.661	0.001	96	206859	30.0	29.6	
135 1,2,3-Trimethylbenzene	105	14.194	14.193	0.001	99	3206272	30.0	30.2	
140 1,3,5-Trichlorobenzene	180	15.500	15.516	-0.016	95	1552919	30.0	29.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

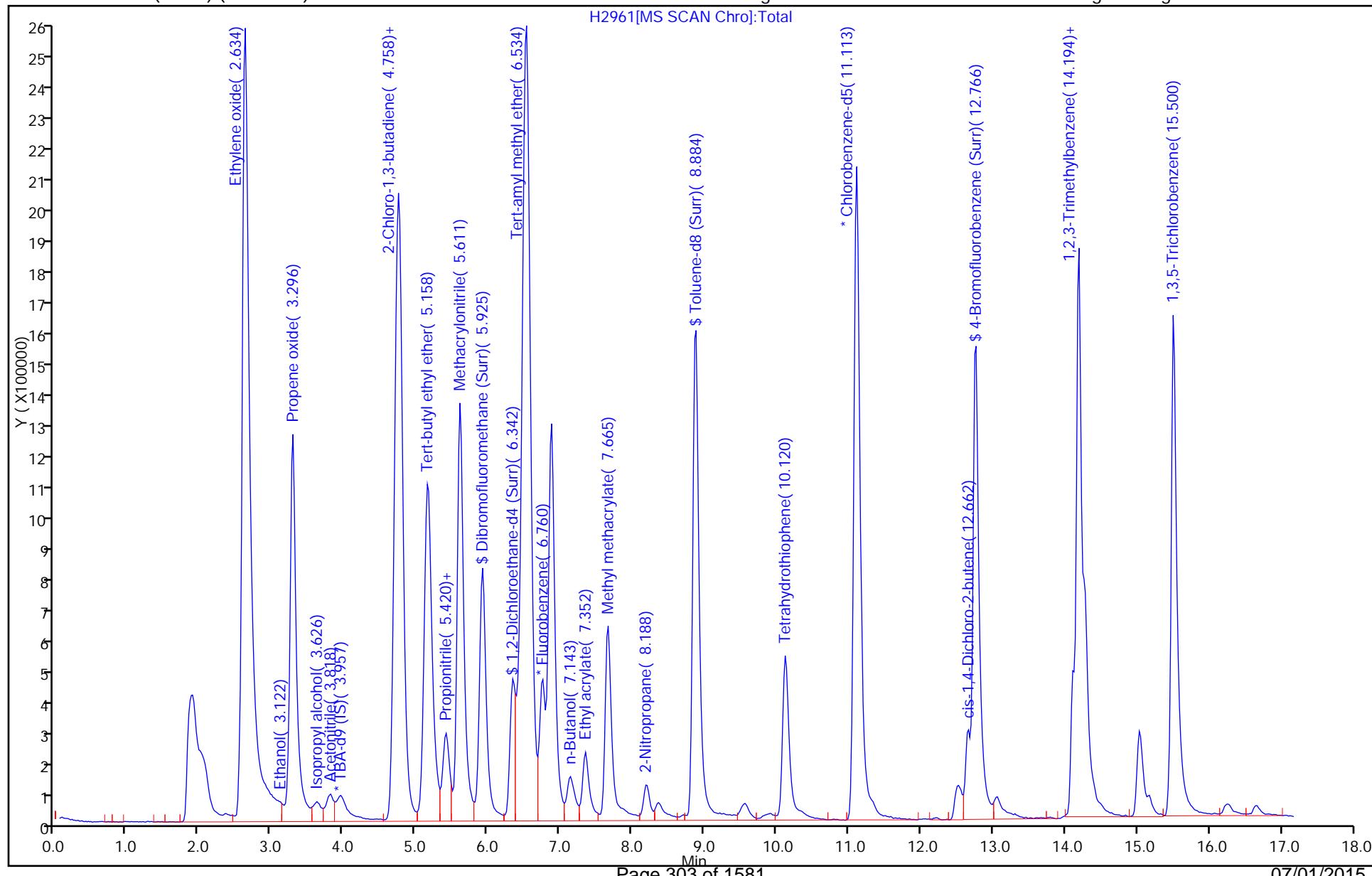
MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Supp A_00011	Amount Added: 15.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 2.40	Units: uL

Report Date: 28-May-2015 07:24:22

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2961.D
 Injection Date: 28-May-2015 04:48:30 Instrument ID: VMS_H
 Lims ID: ic Operator ID: BERGERB
 Client ID:
 Purge Vol: 20.000 mL Worklist Smp#: 20
 Method: AQ_VMSH_8260 Dil. Factor: 1.0000 ALS Bottle#: 15
 Column: DB-624 (75.53) (0.53 mm) Limit Group: MSV - 8260B Water and Solid
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



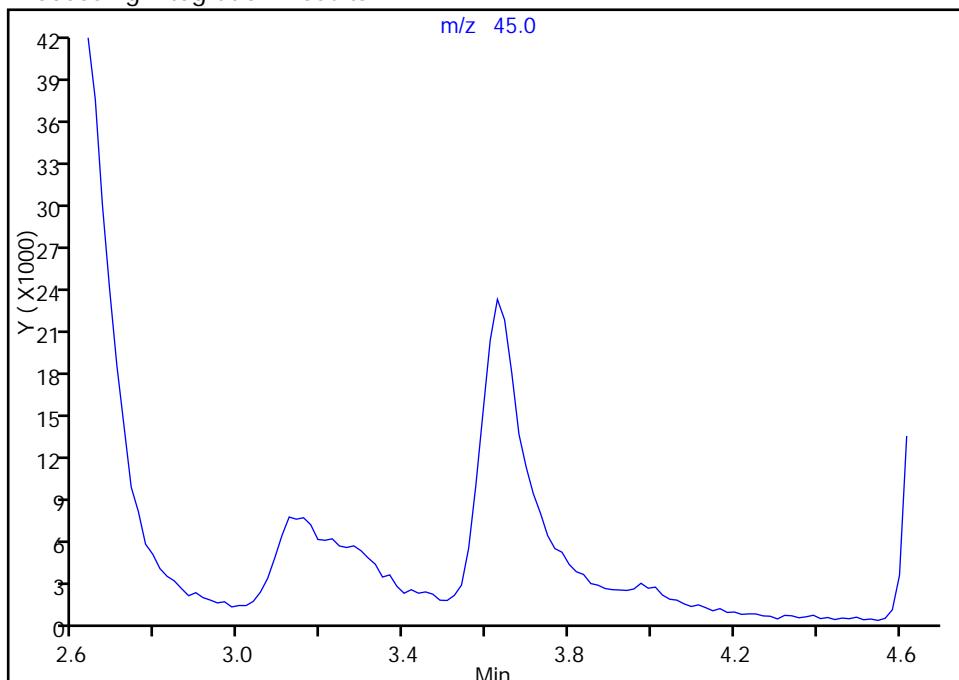
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2961.D
 Injection Date: 28-May-2015 04:48:30 Instrument ID: VMS_H
 Lims ID: ic
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

49 Isopropyl alcohol, CAS: 67-63-0

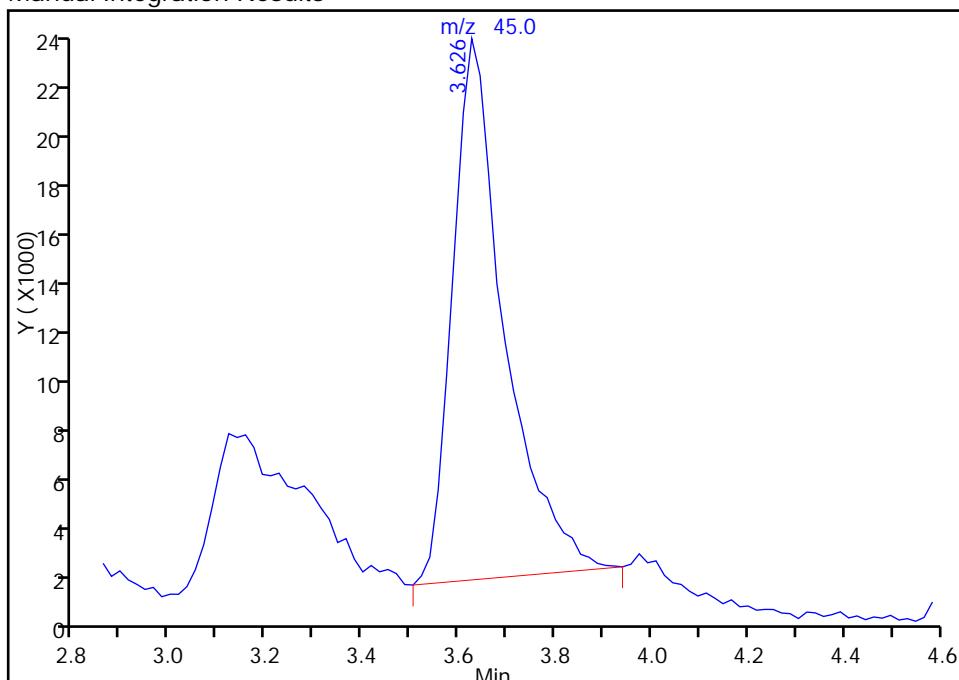
Not Detected
 Expected RT: 3.63

Processing Integration Results



RT: 3.63
 Area: 156601
 Amount: 299.4198
 Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 28-May-2015 06:49:25

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 28-May-2015 05:10:30 ALS Bottle#: 16 Worklist Smp#: 21
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub99
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:23 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt Date: 28-May-2015 06:50:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.970	3.974	-0.004	98	188814	250.0	250.0	
* 2 Fluorobenzene	96	6.756	6.759	-0.003	98	1134348	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.108	11.094	0.014	93	259304	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.106	0.014	98	413886	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.920	5.924	-0.004	93	3238689	60.0	56.5	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.338	6.342	-0.004	83	1797526	60.0	56.6	
\$ 10 Toluene-d8 (Surr)	98	8.880	8.883	-0.003	95	7087877	60.0	56.0	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.762	12.766	-0.004	81	3915034	60.0	55.3	
34 Ethylene oxide	43	2.630	2.633	-0.003	99	6477092	12000	11631	
39 Ethanol	45	3.152	3.156	-0.004	91	200333	3000.0	3214.0	
43 Propene oxide	58	3.291	3.295	-0.004	95	6237685	3000.0	2933.5	
49 Isopropyl alcohol	45	3.640	3.626	0.014	98	312090	600.0	595.7	
51 Acetonitrile	41	3.814	3.817	-0.003	99	480531	750.0	755.6	
62 Isopropyl ether	87	4.754	4.757	-0.003	99	1898580	75.0	72.3	
63 2-Chloro-1,3-butadiene	53	4.789	4.792	-0.003	92	3499683	60.0	58.5	
64 Tert-butyl ethyl ether	59	5.172	5.175	-0.003	99	7387205	75.0	69.4	
69 Ethyl acetate	43	5.415	5.419	-0.004	99	1689137	120.0	117.4	
70 Propionitrile	54	5.450	5.454	-0.004	98	752658	750.0	734.2	
72 Methacrylonitrile	41	5.607	5.610	-0.003	96	5249270	600.0	583.8	
83 Tert-amyl methyl ether	73	6.547	6.551	-0.003	96	5944725	75.0	70.9	
85 n-Butanol	56	7.139	7.160	-0.021	94	479232	1500.0	1599.8	
87 Ethyl acrylate	55	7.348	7.351	-0.003	0	1402868	NC	NC	
91 Methyl methacrylate	100	7.661	7.665	-0.004	95	545200	120.0	108.4	
95 2-Nitropropane	41	8.201	8.187	0.014	97	474539	120.0	127.8	
107 Tetrahydrothiophene	60	10.116	10.119	-0.003	94	640849	60.0	57.4	
119 cis-1,4-Dichloro-2-butene	53	12.658	12.661	-0.003	93	412278	60.0	56.6	
135 1,2,3-Trimethylbenzene	105	14.190	14.193	-0.003	99	6472065	60.0	58.5	
140 1,3,5-Trichlorobenzene	180	15.513	15.516	-0.003	95	3310308	60.0	60.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Supp A_00011	Amount Added: 30.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 4.80	Units: uL

Report Date: 28-May-2015 07:24:23

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D

Injection Date: 28-May-2015 05:10:30

Instrument ID: VMS_H

Lims ID: ic

Operator ID: BERGERB

Client ID:

Worklist Smp#: 21

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

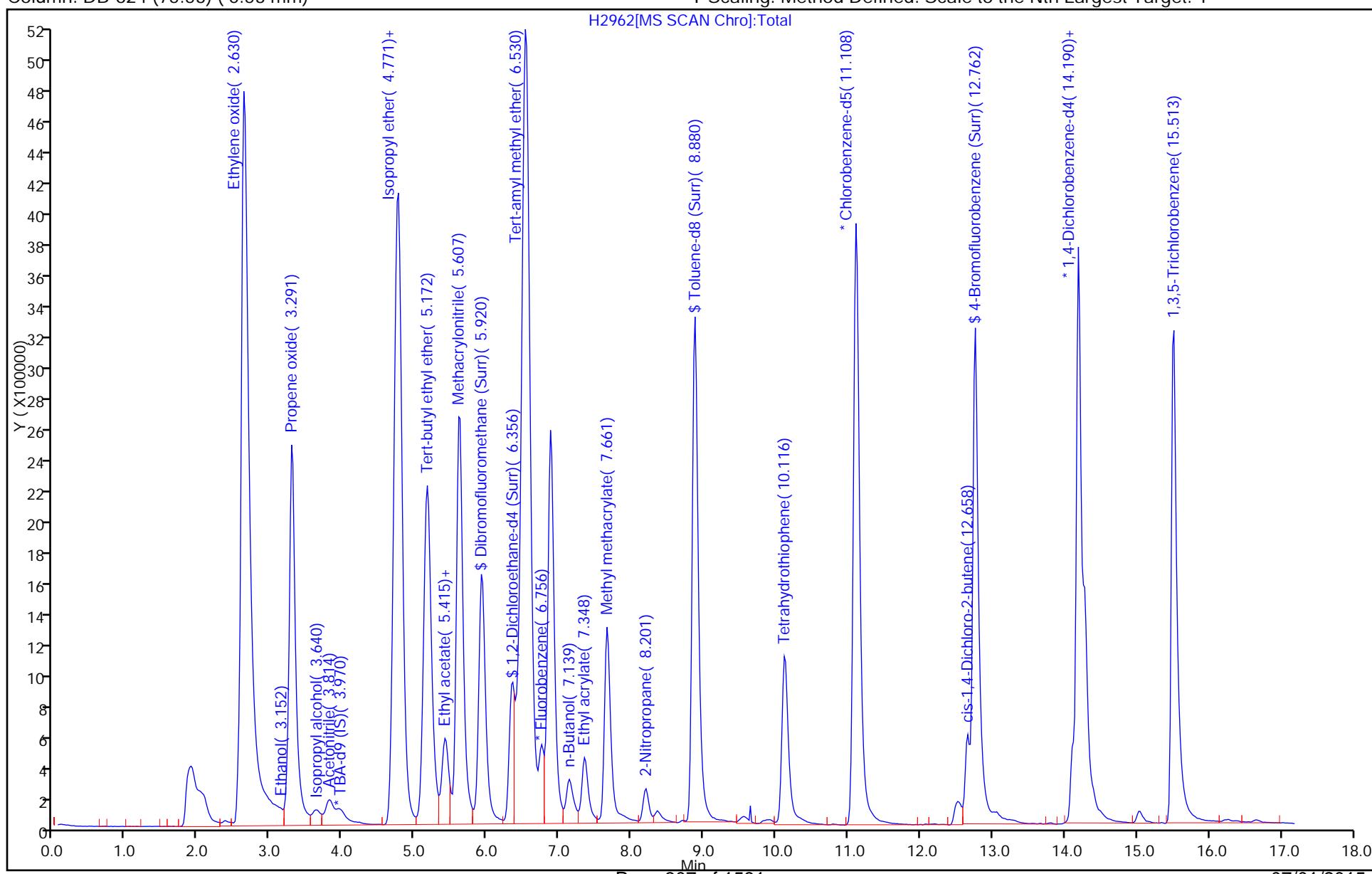
ALS Bottle#: 16

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 277770

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2015 14:32 Calibration End Date: 05/16/2015 16:09 Calibration ID: 22332

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-277770/17	P4181.D
Level 2	IC 280-277770/18	P4182.D
Level 3	IC 280-277770/19	P4183.D
Level 4	ICIS 280-277770/20	P4184.D
Level 5	IC 280-277770/21	P4185.D
Level 6	IC 280-277770/22	P4186.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol	0.3926	0.3089	0.2242	0.2717	0.2174	Lin1	7.9602	0.2254							0.9950		0.9900
	0.2322																
Isopropyl alcohol	1.8386	1.2297	1.1617	1.2020	1.0101	Lin1	6.3855	1.0597							0.9970		0.9900
	1.0975																
Acetonitrile	0.0124	0.0127	0.0138	0.0115	0.0123	Ave		0.0125					6.1		15.0		
	0.0123																
Isopropyl ether	0.2126	0.1784	0.1741	0.1748	0.1854	Ave		0.1848					7.8		15.0		
	0.1836																
2-Chloro-1,3-butadiene	0.6219	0.5651	0.5329	0.5456	0.5638	Ave		0.5616					5.7		15.0		
	0.5403																
Tert-butyl ethyl ether	0.6638	0.5929	0.5593	0.5620	0.5797	Ave		0.5885					6.6		15.0		
	0.5732																
Ethyl acetate	0.1084	0.0914	0.0767	0.0739	0.0768	Lin2	0.0699	0.0731							0.9980		0.9900
	0.0759																
Propionitrile	0.0137	0.0125	0.0117	0.0116	0.0121	Ave		0.0123					6.1		15.0		
	0.0122																
Methacrylonitrile	0.0799	0.0748	0.0724	0.0721	0.0715	Ave		0.0729					5.8		15.0		
	0.0669																
Tert-amyl methyl ether	0.4447	0.4025	0.3938	0.3989	0.4216	Ave		0.4126					4.5		15.0		
	0.4145																
n-Butanol	+++++	0.6922	0.5478	0.4670	0.4934	Lin1	2.4743	0.5382							0.9900		0.9900
	0.5748																
Methyl methacrylate	0.0182	0.0177	0.0189	0.0214	0.0245	Lin1	-0.026	0.0250							0.9970		0.9900
	0.0254																
2-Nitropropane	0.0197	0.0180	0.0183	0.0181	0.0198	Ave		0.0192					6.9		15.0		
	0.0214																
cis-1,4-Dichloro-2-butene	0.1151	0.1040	0.0984	0.1103	0.1231	Ave		0.1132					10.0		15.0		
	0.1285																
1,2,3-Trimethylbenzene	3.8355	3.5163	3.3111	3.3401	3.3696	Ave		3.4335					6.4		15.0		
	3.2281																

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 277770

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2015 14:32 Calibration End Date: 05/16/2015 16:09 Calibration ID: 22332

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	+++++ 0.2472	0.3345	0.2638	0.2530	0.2532	Ave		0.2704				13.5		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2343	0.3160	0.2593	0.2444	0.2443	Ave		0.2597				12.6		15.0			
Toluene-d8 (Surr)	+++++ 4.5625	6.1976	5.0652	5.0087	4.9481	Ave		5.1564				11.9		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.1346	1.3331	1.1134	1.1414	1.1655	Ave		1.1776				7.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 277770

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2015 14:32 Calibration End Date: 05/16/2015 16:09 Calibration ID: 22332

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-277770/17	P4181.D
Level 2	IC 280-277770/18	P4182.D
Level 3	IC 280-277770/19	P4183.D
Level 4	ICIS 280-277770/20	P4184.D
Level 5	IC 280-277770/21	P4185.D
Level 6	IC 280-277770/22	P4186.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethanol	TBA	Lin1	15571 563070	21870	39333	96905	252321	50.0 3000	100	250	500	1500
Isopropyl alcohol	TBA	Lin1	14583 532321	17412	40758	85725	234529	10.0 600	20.0	50.0	100	300
Acetonitrile	FB	Ave	22882 1423166	43353	117787	195491	679903	12.5 750	25.0	62.5	125	375
Isopropyl ether	FB	Ave	39257 2131372	60712	148529	297148	1023249	1.25 75.0	2.50	6.25	12.5	37.5
2-Chloro-1,3-butadiene	FB	Ave	91873 5017432	153820	363628	742143	2489451	1.00 60.0	2.00	5.00	10.0	30.0
Tert-butyl ethyl ether	FB	Ave	122582 6654404	201747	477087	955476	3199521	1.25 75.0	2.50	6.25	12.5	37.5
Ethyl acetate	FB	Lin2	32024 1409215	49754	104632	200976	678210	2.00 120	4.00	10.0	20.0	60.0
Propionitrile	FB	Ave	25240 1419726	42507	99970	197204	669044	12.5 750	25.0	62.5	125	375
Methacrylonitrile	FB	Ave	117984 6216645	203501	494178	980416	3157126	10.0 600	20.0	50.0	100	300
Tert-amyl methyl ether	FB	Ave	82120 4811394	136940	335870	678132	2327287	1.25 75.0	2.50	6.25	12.5	37.5
n-Butanol	TBA	Lin1	+++++ 696950	24502	48044	83269	286417	+++++ 1500	50.0	125	250	750
Methyl methacrylate	FB	Lin1	5367 472333	9647	25824	58321	216416	2.00 120	4.00	10.0	20.0	60.0
2-Nitropropane	FB	Ave	5819 396951	9811	24920	49359	174529	2.00 120	4.00	10.0	20.0	60.0
cis-1,4-Dichloro-2-butene	DCB	Ave	4819 362216	8020	19281	43165	164561	1.00 60.0	2.00	5.00	10.0	30.0
1,2,3-Trimethylbenzene	DCB	Ave	160603 9100973	271090	648750	1307384	4504191	1.00 60.0	2.00	5.00	10.0	30.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 2296089	91065	179996	344190	1117846	+++++ 60.0	2.00	5.00	10.0	30.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 277770

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2015 14:32 Calibration End Date: 05/16/2015 16:09 Calibration ID: 22332

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 2175942	86021	176940	332451	1078947	+++++ 60.0	2.00	5.00	10.0	30.0
Toluene-d8 (Surr)	CBZ	Ave	+++++ 9006861	346297	716985	1418435	4708702	+++++ 60.0	2.00	5.00	10.0	30.0
4-Bromofluorobenzene (Surr)	DCB	Ave	+++++ 3198795	102771	218155	446776	1557885	+++++ 60.0	2.00	5.00	10.0	30.0

Curve Type Legend:

Ave = Average ISTD

Lin1 = Linear 1/conc ISTD

Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4181.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 16-May-2015 14:32:30 ALS Bottle#: 20 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub114
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:50:58 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj

Date:

18-May-2015 10:52:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.795	-0.001	94	198291	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.768	-0.001	98	1846658	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.027	10.027	0.000	89	381088	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.872	-0.001	97	523403	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.224	0.000	92	59059	1.00	1.48	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	98	56782	1.00	1.48	
\$ 7 Toluene-d8 (Surr)	98	8.947	8.940	0.007	95	225888	1.00	1.44	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.899	10.892	0.007	87	67182	1.00	1.36	
28 Ethylene oxide	43	4.725	4.725	-0.001	100	195736	200.0	191.1	
33 Ethanol	45	5.116	5.130	-0.014	92	15571	50.0	51.8	
38 Propene oxide	58	5.367	5.367	0.000	97	232232	50.0	59.7	
42 Isopropyl alcohol	45	5.536	5.544	-0.008	93	14583	10.0	11.3	
46 Acetonitrile	41	5.780	5.780	0.000	28	22882	12.5	12.4	
56 Isopropyl ether	87	6.387	6.387	0.000	92	39257	1.25	1.44	
58 2-Chloro-1,3-butadiene	53	6.509	6.516	-0.007	94	91873	1.00	1.11	
59 Tert-butyl ethyl ether	59	6.666	6.666	0.000	96	122582	1.25	1.41	
60 Ethyl acetate	43	6.823	6.824	-0.001	96	32024	2.00	2.01	
65 Propionitrile	54	6.916	6.917	-0.001	96	25240	12.5	13.9	
66 Methacrylonitrile	41	7.031	7.031	0.000	95	117984	10.0	11.0	
75 Tert-amyl methyl ether	73	7.567	7.574	-0.007	86	82120	1.25	1.35	
78 n-Butanol	56		7.796				ND	ND	
81 Methyl methacrylate	100	8.189	8.182	0.007	93	5367	2.00	2.48	
88 2-Nitropropane	41	8.568	8.561	0.007	97	5819	2.00	2.05	
99 Tetrahydrothiophene	60	9.626	9.634	-0.008	90	8415	1.00	1.35	
110 cis-1,4-Dichloro-2-butene	53	10.778	10.770	0.008	95	4819	1.00	1.02	
125 1,2,3-Trimethylbenzene	105	11.893	11.893	0.000	98	160603	1.00	1.12	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	96	71543	1.00	1.16	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00011	Amount Added: 0.50	Units: uL
MV-ARCH SS A_00035	Amount Added: 0.08	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 18-May-2015 11:50:58

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

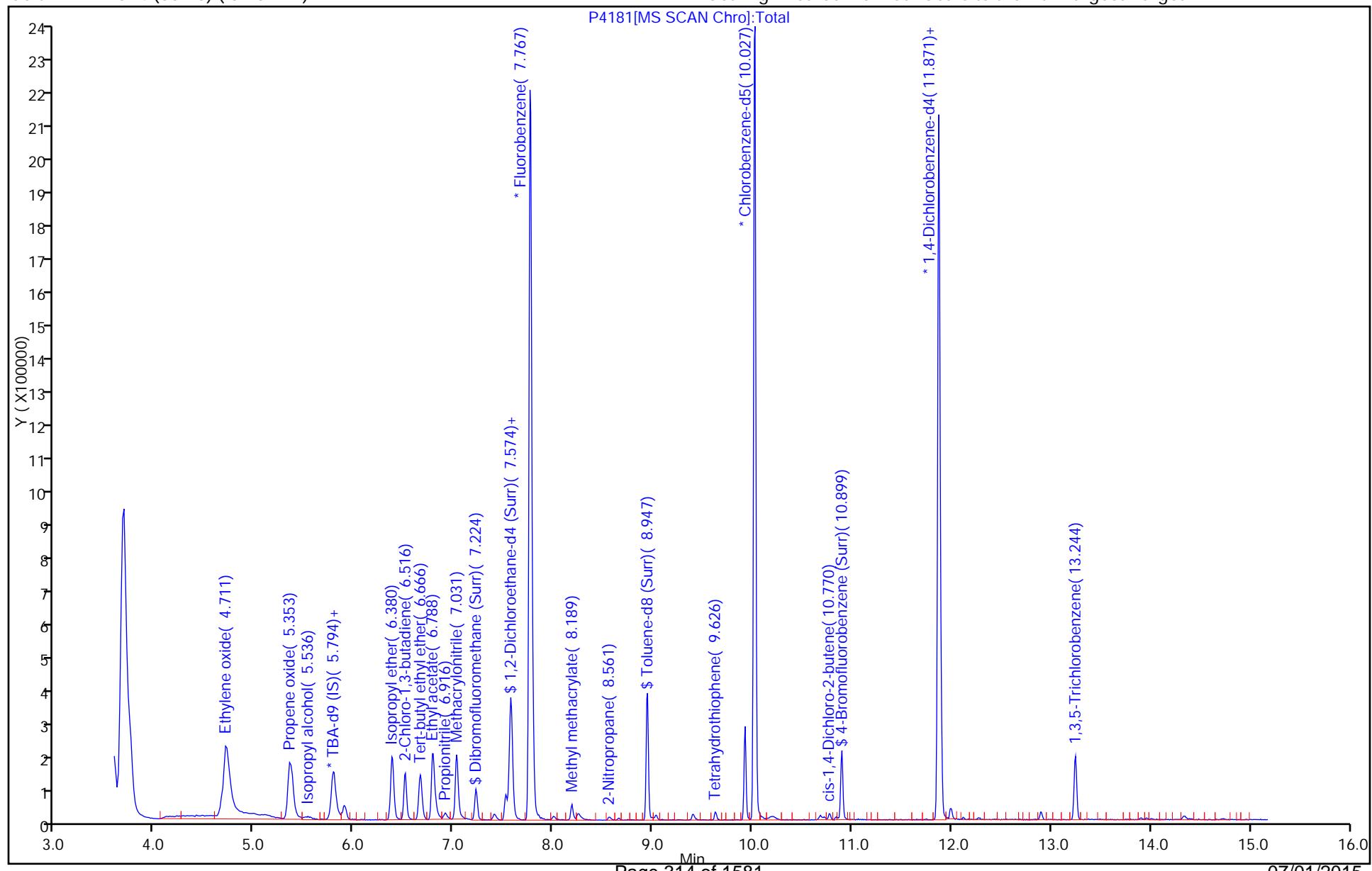
Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4181.D
 Injection Date: 16-May-2015 14:32:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: CONTRERASE
Worklist Smp#: 17Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 20

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4182.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 16-May-2015 14:51:30 ALS Bottle#: 21 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub114
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:50:58 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj

Date:

18-May-2015 10:52:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.793	5.795	-0.002	92	176996	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.768	-0.001	98	1701294	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.019	10.027	-0.008	89	349224	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.872	-0.001	98	481839	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.223	7.224	-0.001	93	91065	2.00	2.47	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.523	7.524	-0.001	99	86021	2.00	2.43	
\$ 7 Toluene-d8 (Surr)	98	8.946	8.940	0.006	94	346297	2.00	2.40	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.898	10.892	0.006	87	102771	2.00	2.26	
28 Ethylene oxide	43	4.712	4.725	-0.013	100	331943	400.0	424.5	
33 Ethanol	45	5.131	5.130	0.001	85	21870	100.0	101.7	
38 Propene oxide	58	5.368	5.367	0.001	96	389116	100.0	108.6	
42 Isopropyl alcohol	45	5.543	5.544	-0.001	96	17412	20.0	17.2	
46 Acetonitrile	41	5.786	5.780	0.006	82	43353	25.0	25.5	
56 Isopropyl ether	87	6.387	6.387	0.000	93	60712	2.50	2.41	
58 2-Chloro-1,3-butadiene	53	6.515	6.516	-0.001	94	153820	2.00	2.01	
59 Tert-butyl ethyl ether	59	6.665	6.666	-0.001	96	201747	2.50	2.52	
60 Ethyl acetate	43	6.823	6.824	-0.001	98	49754	4.00	4.05	
65 Propionitrile	54	6.916	6.917	-0.001	98	42507	25.0	25.4	
66 Methacrylonitrile	41	7.030	7.031	-0.001	96	203501	20.0	20.5	
75 Tert-amyl methyl ether	73	7.574	7.574	0.000	89	136940	2.50	2.44	
78 n-Butanol	56	7.774	7.796	-0.022	62	24502	50.0	59.7	M
81 Methyl methacrylate	100	8.188	8.182	0.006	94	9647	4.00	3.87	
88 2-Nitropropane	41	8.560	8.561	-0.001	97	9811	4.00	3.75	
99 Tetrahydrothiophene	60	9.626	9.634	-0.008	92	13703	2.00	1.94	
110 cis-1,4-Dichloro-2-butene	53	10.770	10.770	0.000	94	8020	2.00	1.84	
125 1,2,3-Trimethylbenzene	105	11.892	11.893	-0.001	98	271090	2.00	2.05	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	96	119106	2.00	2.10	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

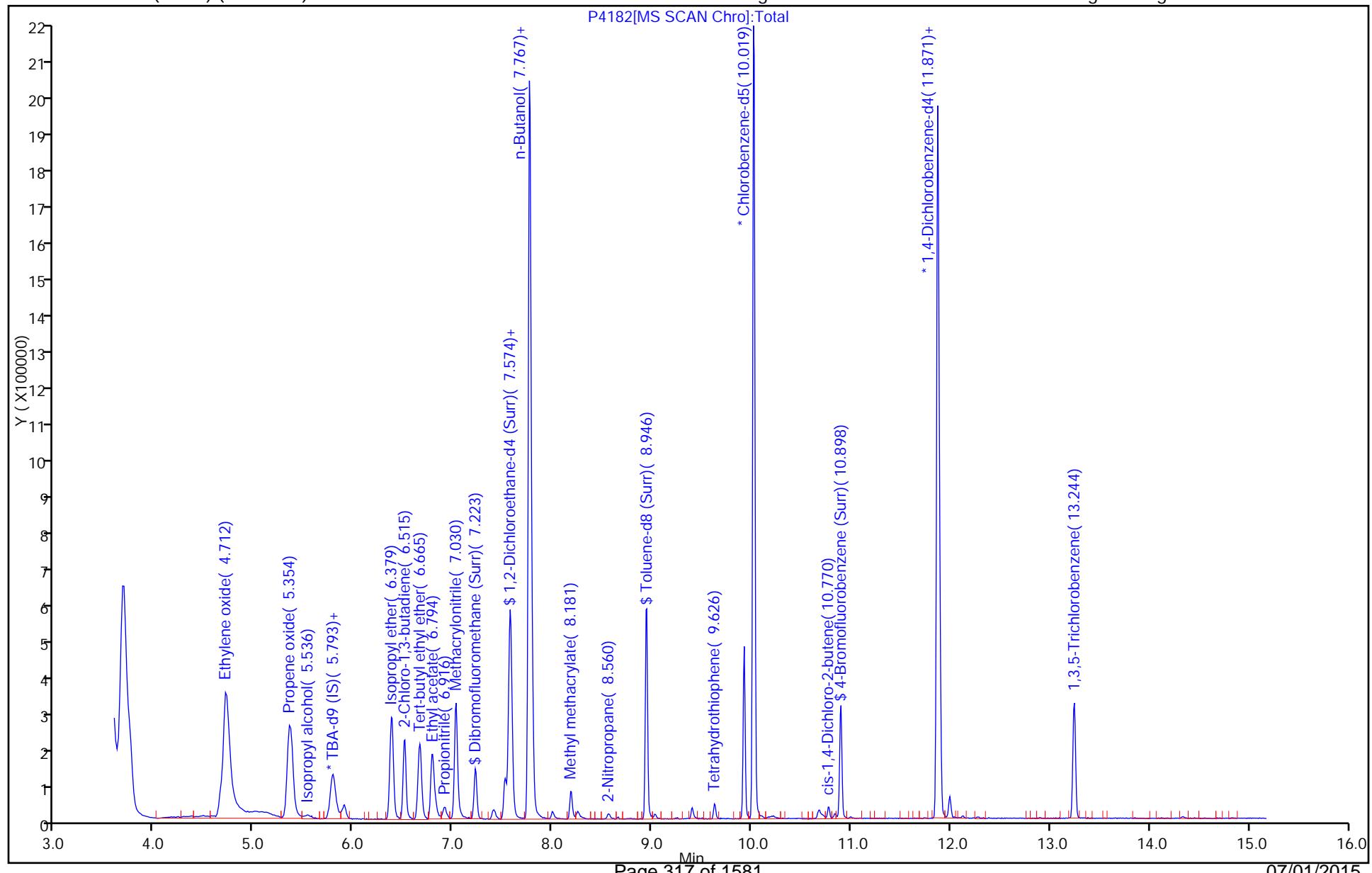
MV-Supp A_00011	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00035	Amount Added: 0.16	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 18-May-2015 11:50:59

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4182.D
 Injection Date: 16-May-2015 14:51:30 Instrument ID: VMS_P
 Lims ID: ic Operator ID: CONTRERASE
 Client ID:
 Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 21
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



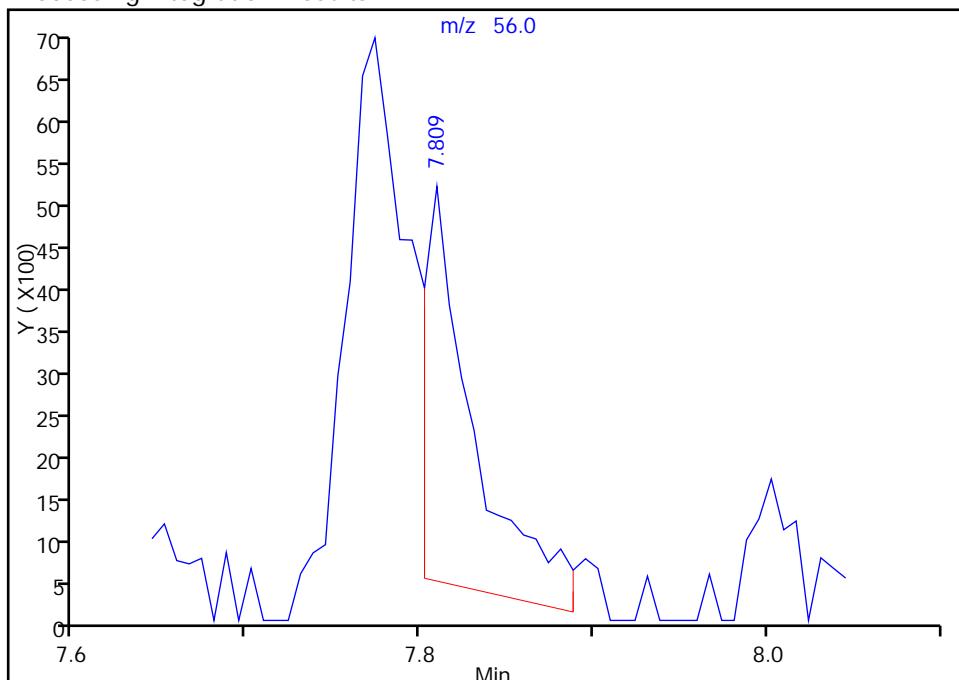
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4182.D
 Injection Date: 16-May-2015 14:51:30 Instrument ID: VMS_P
 Lims ID: ic
 Client ID:
 Operator ID: CONTRERASE ALS Bottle#: 21 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

78 n-Butanol, CAS: 71-36-3

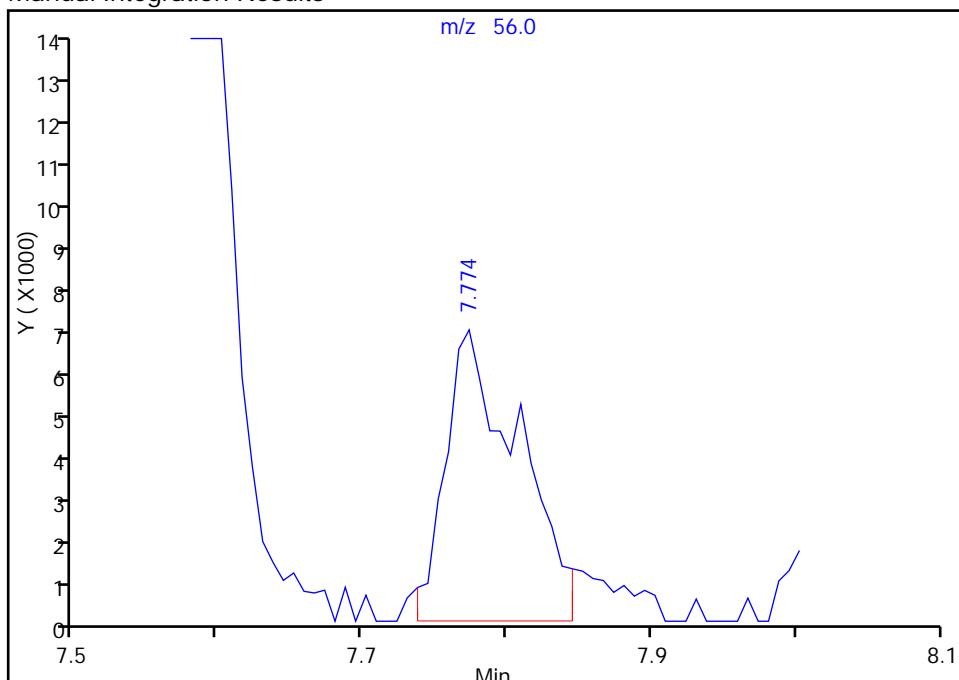
RT: 7.81
 Area: 9387
 Amount: 47.330619
 Amount Units: ug/l

Processing Integration Results



RT: 7.77
 Area: 24502
 Amount: 59.705363
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 18-May-2015 10:53:57

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4183.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 16-May-2015 15:11:30 ALS Bottle#: 22 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub114
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:50:59 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj

Date:

18-May-2015 10:54:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.795	-0.001	93	175419	250.0	250.0	
* 1 Fluorobenzene	96	7.774	7.768	0.006	98	1705900	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.019	10.027	-0.008	90	353881	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.872	-0.001	98	489823	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.224	0.000	92	179996	5.00	4.88	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	99	176940	5.00	4.99	
\$ 7 Toluene-d8 (Surr)	98	8.947	8.940	0.007	95	716985	5.00	4.91	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.892	0.000	86	218155	5.00	4.73	
28 Ethylene oxide	43	4.725	4.725	0.000	100	747492	1000.0	1061.1	
33 Ethanol	45	5.130	5.130	0.000	97	39333	250.0	213.4	
38 Propene oxide	58	5.367	5.367	0.000	96	892117	250.0	248.3	
42 Isopropyl alcohol	45	5.543	5.544	-0.001	99	40758	50.0	48.8	
46 Acetonitrile	41	5.801	5.780	0.021	96	117787	62.5	69.0	M
56 Isopropyl ether	87	6.387	6.387	0.000	94	148529	6.25	5.89	
58 2-Chloro-1,3-butadiene	53	6.516	6.516	0.000	94	363628	5.00	4.74	
59 Tert-butyl ethyl ether	59	6.666	6.666	0.000	97	477087	6.25	5.94	
60 Ethyl acetate	43	6.823	6.824	-0.001	98	104632	10.0	9.54	
65 Propionitrile	54	6.916	6.917	-0.001	99	99970	62.5	59.5	
66 Methacrylonitrile	41	7.031	7.031	0.000	96	494178	50.0	49.7	
75 Tert-amyl methyl ether	73	7.574	7.574	0.000	92	335870	6.25	5.96	
78 n-Butanol	56	7.796	7.796	0.000	25	48044	125.0	122.6	
81 Methyl methacrylate	100	8.189	8.182	0.007	95	25824	10.0	8.60	
88 2-Nitropropane	41	8.561	8.561	0.000	97	24920	10.0	9.51	
99 Tetrahydrothiophene	60	9.626	9.634	-0.008	93	35960	5.00	4.09	
110 cis-1,4-Dichloro-2-butene	53	10.770	10.770	0.000	96	19281	5.00	4.35	
125 1,2,3-Trimethylbenzene	105	11.893	11.893	0.000	99	648750	5.00	4.82	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	96	271698	5.00	4.71	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Supp A_00011	Amount Added: 2.50	Units: uL
MV-ARCH SS A_00035	Amount Added: 0.40	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 18-May-2015 11:50:59

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

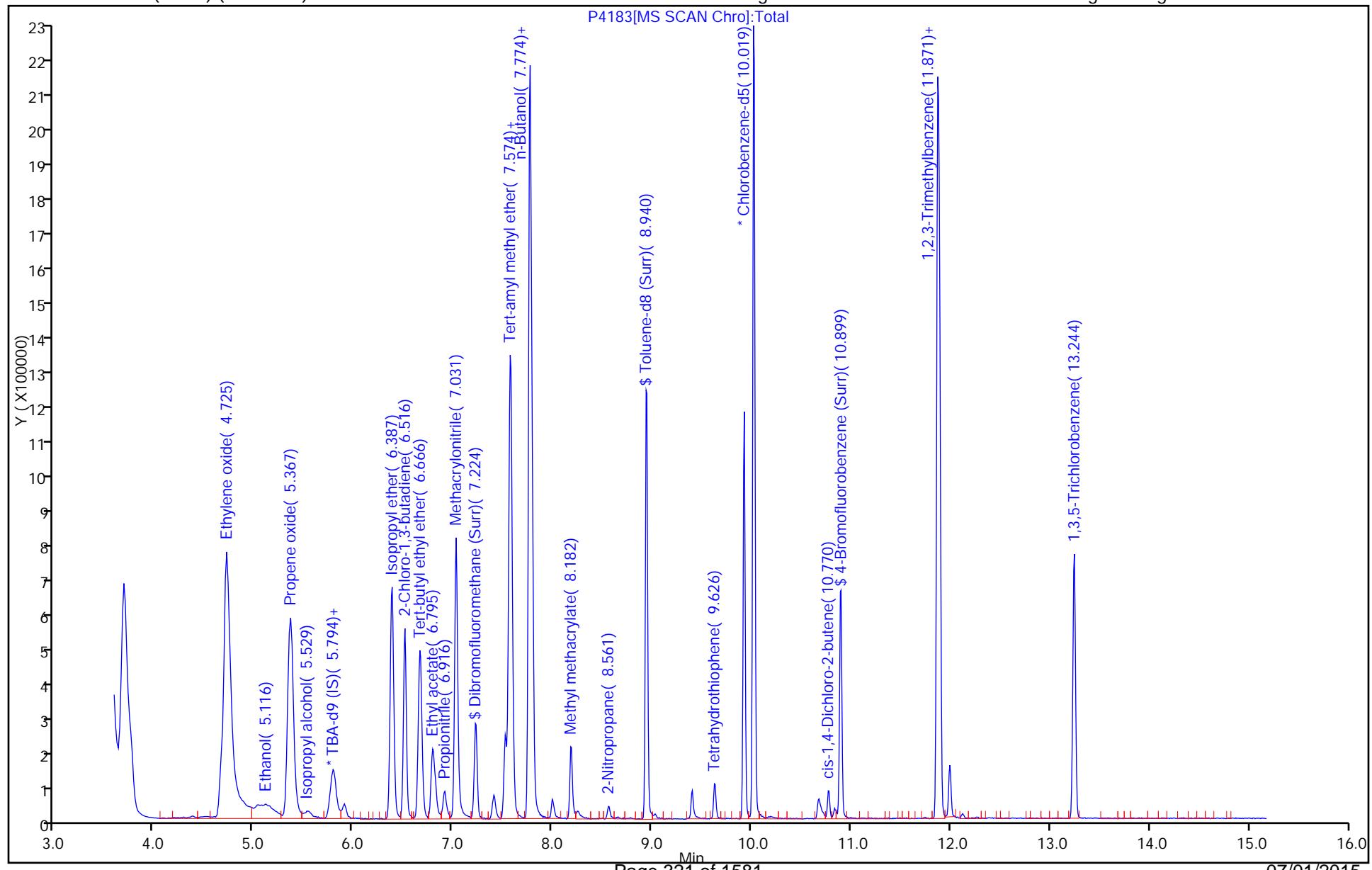
Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4183.D
 Injection Date: 16-May-2015 15:11:30
 Lims ID: ic
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: CONTRERASE
Worklist Smp#: 19Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 22

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



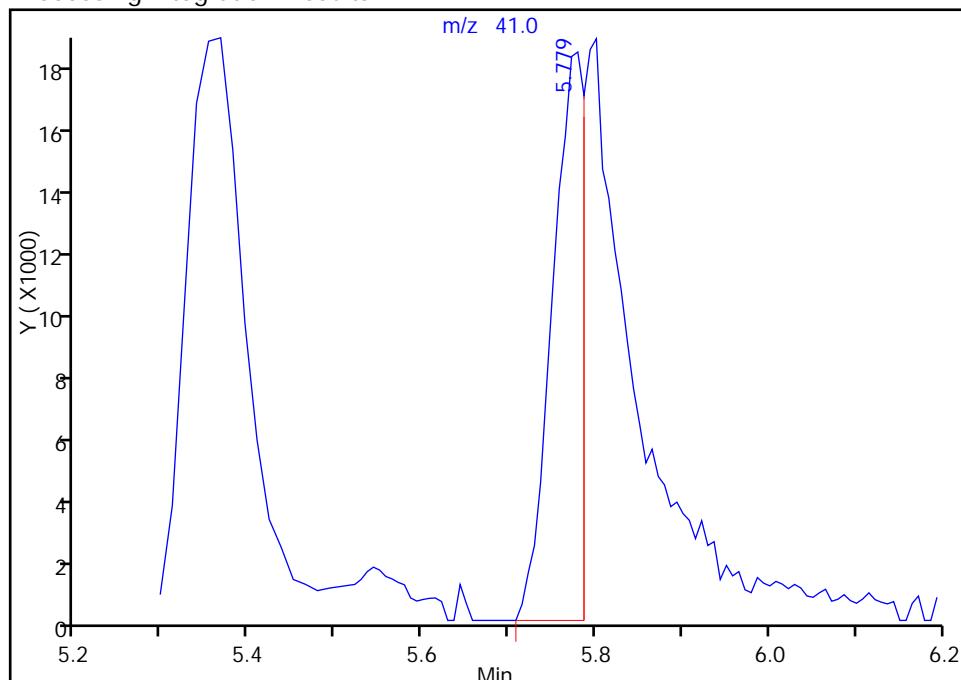
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4183.D
 Injection Date: 16-May-2015 15:11:30 Instrument ID: VMS_P
 Lims ID: ic
 Client ID:
 Operator ID: CONTRERASE ALS Bottle#: 22 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

46 Acetonitrile, CAS: 75-05-8

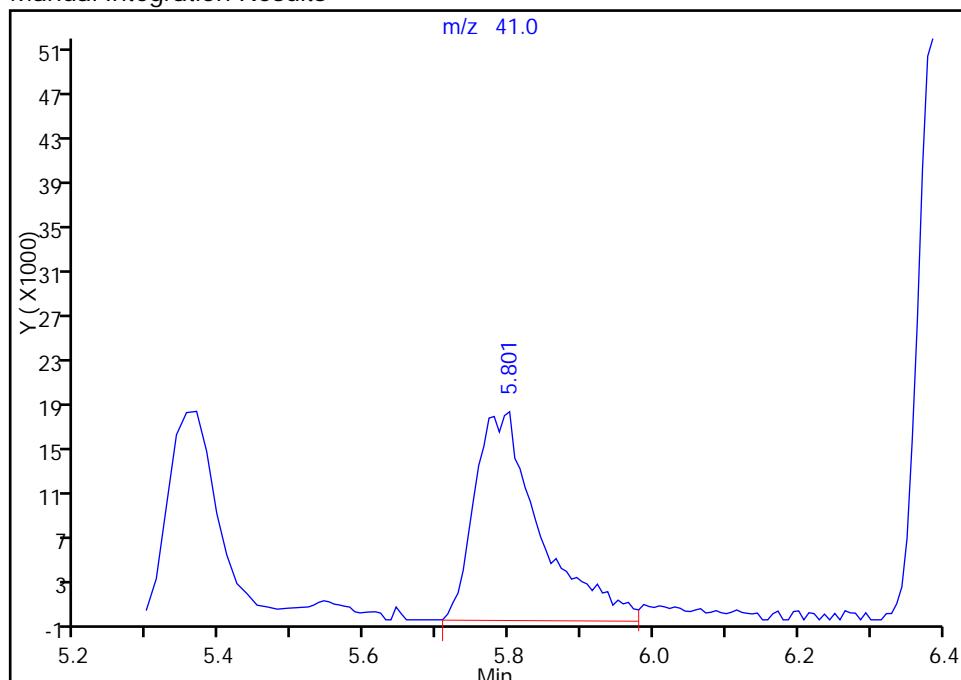
RT: 5.78
 Area: 47018
 Amount: 37.508176
 Amount Units: ug/l

Processing Integration Results



RT: 5.80
 Area: 117787
 Amount: 69.031311
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 18-May-2015 10:55:11

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4184.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 16-May-2015 15:30:30 ALS Bottle#: 23 Worklist Smp#: 20
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub114

Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:51:00 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj Date: 18-May-2015 10:53:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.794	0.000	93	178300	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.767	0.000	98	1700209	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.020	10.020	0.000	90	353996	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.872	11.872	0.000	98	489272	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.224	0.000	92	344190	10.0	9.36	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	98	332451	10.0	9.41	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.940	0.000	95	1418435	10.0	9.71	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.892	0.000	86	446776	10.0	9.69	
28 Ethylene oxide	43	4.725	4.725	0.000	100	1404097	2000.0	2076.4	
33 Ethanol	45	5.130	5.130	0.000	99	96905	500.0	567.4	
38 Propene oxide	58	5.367	5.367	0.000	96	1740388	500.0	486.1	
42 Isopropyl alcohol	45	5.544	5.544	0.000	96	85725	100.0	107.4	
46 Acetonitrile	41	5.780	5.780	0.000	99	195491	125.0	115.0	
56 Isopropyl ether	87	6.387	6.387	0.000	94	297148	12.5	11.8	
58 2-Chloro-1,3-butadiene	53	6.516	6.516	0.000	94	742143	10.0	9.72	
59 Tert-butyl ethyl ether	59	6.666	6.666	0.000	97	955476	12.5	11.9	
60 Ethyl acetate	43	6.824	6.824	0.000	99	200976	20.0	19.3	
65 Propionitrile	54	6.917	6.917	0.000	99	197204	125.0	117.8	
66 Methacrylonitrile	41	7.031	7.031	0.000	96	980416	100.0	98.8	
75 Tert-amyl methyl ether	73	7.574	7.574	0.000	93	678132	12.5	12.1	
78 n-Butanol	56	7.796	7.796	0.000	92	83269	250.0	212.3	
81 Methyl methacrylate	100	8.182	8.182	0.000	95	58321	20.0	18.2	
88 2-Nitropropane	41	8.561	8.561	0.000	95	49359	20.0	18.9	
99 Tetrahydrothiophene	60	9.634	9.634	0.000	94	79862	10.0	8.37	
110 cis-1,4-Dichloro-2-butene	53	10.770	10.770	0.000	97	43165	10.0	9.74	
125 1,2,3-Trimethylbenzene	105	11.893	11.893	0.000	98	1307384	10.0	9.73	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	96	546845	10.0	9.49	

Reagents:

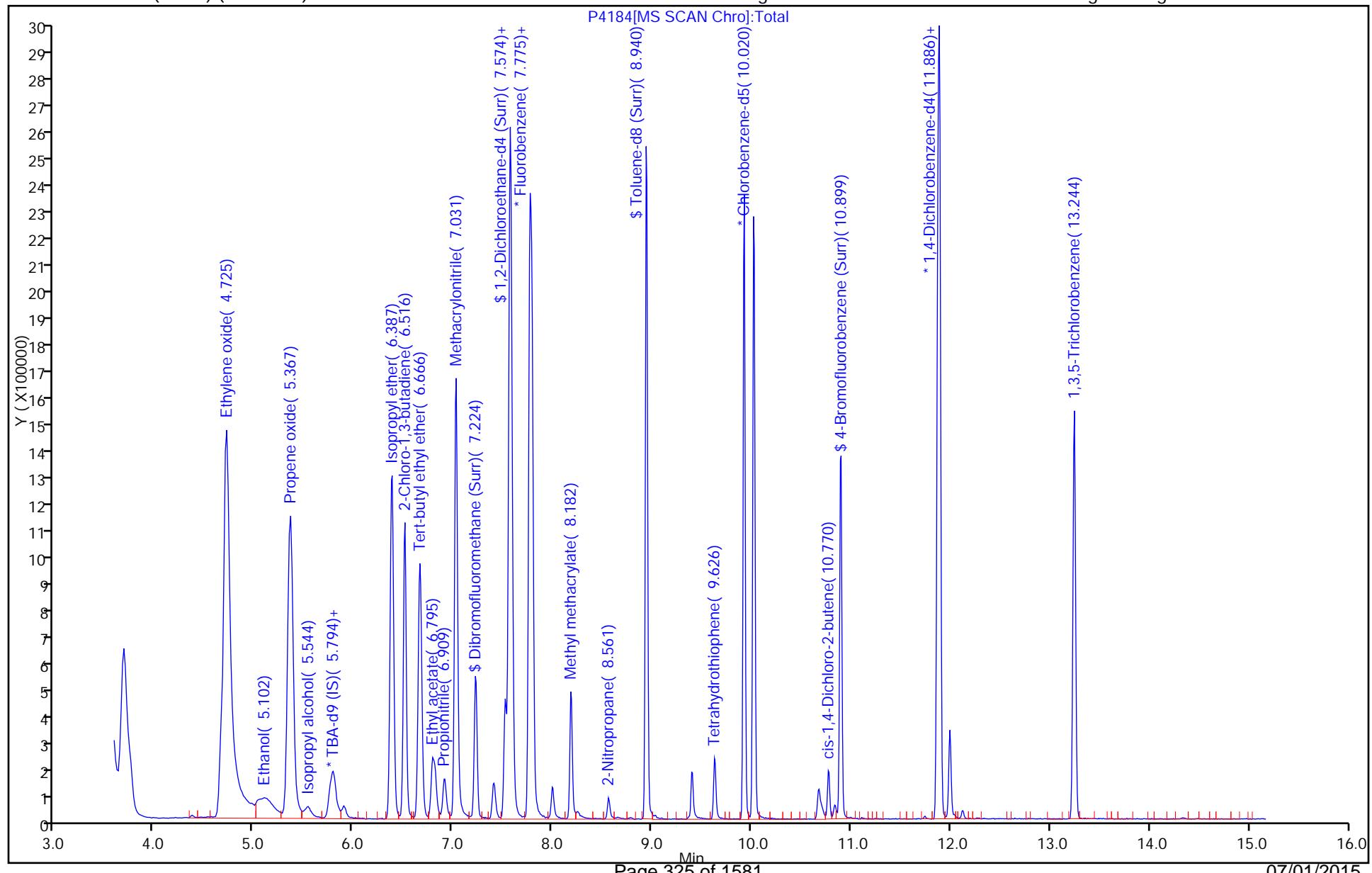
MV-Supp A_00011	Amount Added: 5.00	Units: uL
MV-ARCH SS A_00035	Amount Added: 0.80	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 18-May-2015 11:51:00

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4184.D
 Injection Date: 16-May-2015 15:30:30 Instrument ID: VMS_P
 Lims ID: icis Operator ID: CONTRERASE
 Client ID:
 Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 23
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4185.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 16-May-2015 15:50:30 ALS Bottle#: 24 Worklist Smp#: 21
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist: chrom-AQ_V MSP_8260*sub114
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_V MSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:51:00 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj

Date: 18-May-2015 10:57:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.794	0.000	95	193481	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.767	0.000	99	1839878	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.020	0.006	89	396505	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.872	-0.001	98	556956	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.224	0.000	93	1117846	30.0	28.1	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	99	1078947	30.0	28.2	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.940	0.000	95	4708702	30.0	28.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.892	0.000	86	1557885	30.0	29.7	
28 Ethylene oxide	43	4.710	4.725	-0.015	99	4205408	6000.0	5899.7	
33 Ethanol	45	5.115	5.130	-0.015	99	252321	1500.0	1411.0	
38 Propene oxide	58	5.353	5.367	-0.014	96	5330268	1500.0	1375.8	
42 Isopropyl alcohol	45	5.536	5.544	-0.008	98	234529	300.0	279.9	
46 Acetonitrile	41	5.772	5.780	-0.008	99	679903	375.0	369.5	
56 Isopropyl ether	87	6.387	6.387	0.000	94	1023249	37.5	37.6	
58 2-Chloro-1,3-butadiene	53	6.516	6.516	0.000	94	2489451	30.0	30.1	
59 Tert-butyl ethyl ether	59	6.666	6.666	0.000	97	3199521	37.5	36.9	
60 Ethyl acetate	43	6.816	6.824	-0.008	99	678210	60.0	62.1	
65 Propionitrile	54	6.909	6.917	-0.008	99	669044	375.0	369.4	
66 Methacrylonitrile	41	7.023	7.031	-0.008	96	3157126	300.0	294.1	
75 Tert-amyl methyl ether	73	7.567	7.574	-0.007	94	2327287	37.5	38.3	
78 n-Butanol	56	7.803	7.796	0.007	94	286417	750.0	683.0	
81 Methyl methacrylate	100	8.182	8.182	0.000	94	216416	60.0	59.8	
88 2-Nitropropane	41	8.561	8.561	0.000	99	174529	60.0	61.7	
99 Tetrahydrothiophene	60	9.626	9.634	-0.008	95	329743	30.0	29.3	
110 cis-1,4-Dichloro-2-butene	53	10.770	10.770	0.000	94	164561	30.0	32.6	
125 1,2,3-Trimethylbenzene	105	11.893	11.893	0.000	99	4504191	30.0	29.4	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	96	1862082	30.0	28.4	

Reagents:

MV-Supp A_00011	Amount Added: 15.00	Units: uL
MV-ARCH SS A_00035	Amount Added: 2.40	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 18-May-2015 11:51:01

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4185.D

Injection Date: 16-May-2015 15:50:30

Instrument ID: VMS_P

Lims ID: ic

Operator ID: CONTRERASE
Worklist Smp#: 21

Client ID:

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

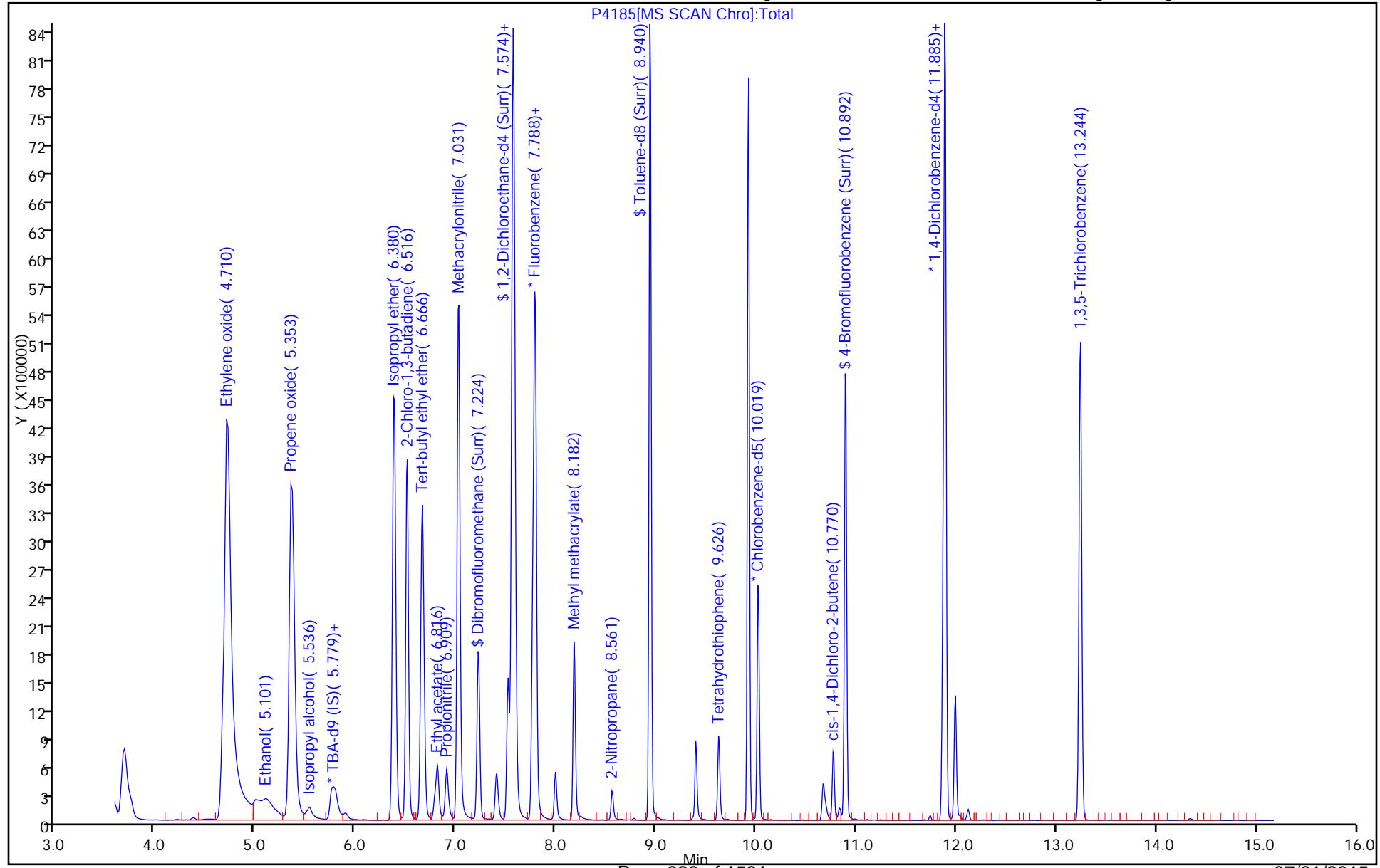
ALS Bottle#: 24

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 16-May-2015 16:09:30 ALS Bottle#: 25 Worklist Smp#: 22
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub114
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:51:01 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj Date: 18-May-2015 10:57:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.787	5.794	-0.007	97	202095	250.0	250.0	
* 1 Fluorobenzene	96	7.768	7.767	0.001	98	1934807	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.020	10.020	0.000	89	411276	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.872	11.872	0.000	96	587359	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.225	7.224	0.001	93	2296089	60.0	54.9	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.518	7.524	-0.006	99	2175942	60.0	54.1	
\$ 7 Toluene-d8 (Surr)	98	8.941	8.940	0.001	95	9006861	60.0	53.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.893	10.892	0.001	86	3198795	60.0	57.8	
28 Ethylene oxide	43	4.697	4.725	-0.028	99	8047984	12000	10807	
33 Ethanol	45	5.116	5.130	-0.014	97	563070	3000.0	3054.7	
38 Propene oxide	58	5.353	5.367	-0.014	96	10227364	3000.0	2510.2	
42 Isopropyl alcohol	45	5.537	5.544	-0.007	99	532321	600.0	615.4	
46 Acetonitrile	41	5.759	5.780	-0.021	99	1423166	750.0	735.4	
56 Isopropyl ether	87	6.381	6.387	-0.006	93	2131372	75.0	74.5	
58 2-Chloro-1,3-butadiene	53	6.510	6.516	-0.006	95	5017432	60.0	57.7	
59 Tert-butyl ethyl ether	59	6.660	6.666	-0.006	97	6654404	75.0	73.1	
60 Ethyl acetate	43	6.810	6.824	-0.014	99	1409215	120.0	123.7	
65 Propionitrile	54	6.903	6.917	-0.014	99	1419726	750.0	745.4	
66 Methacrylonitrile	41	7.024	7.031	-0.007	95	6216645	600.0	550.7	
75 Tert-amyl methyl ether	73	7.568	7.574	-0.006	93	4811394	75.0	75.3	
78 n-Butanol	56	7.797	7.796	0.001	92	696950	1500.0	1597.3	
81 Methyl methacrylate	100	8.183	8.182	0.001	94	472333	120.0	123.1	
88 2-Nitropropane	41	8.562	8.561	0.001	99	396951	120.0	133.5	
99 Tetrahydrothiophene	60	9.627	9.634	-0.007	95	742820	60.0	62.9	
110 cis-1,4-Dichloro-2-butene	53	10.771	10.770	0.001	91	362216	60.0	68.1	
125 1,2,3-Trimethylbenzene	105	11.886	11.893	-0.007	98	9100973	60.0	56.4	
16 1,3,5-Trichlorobenzene	180	13.245	13.244	0.001	96	3958184	60.0	57.2	

Reagents:

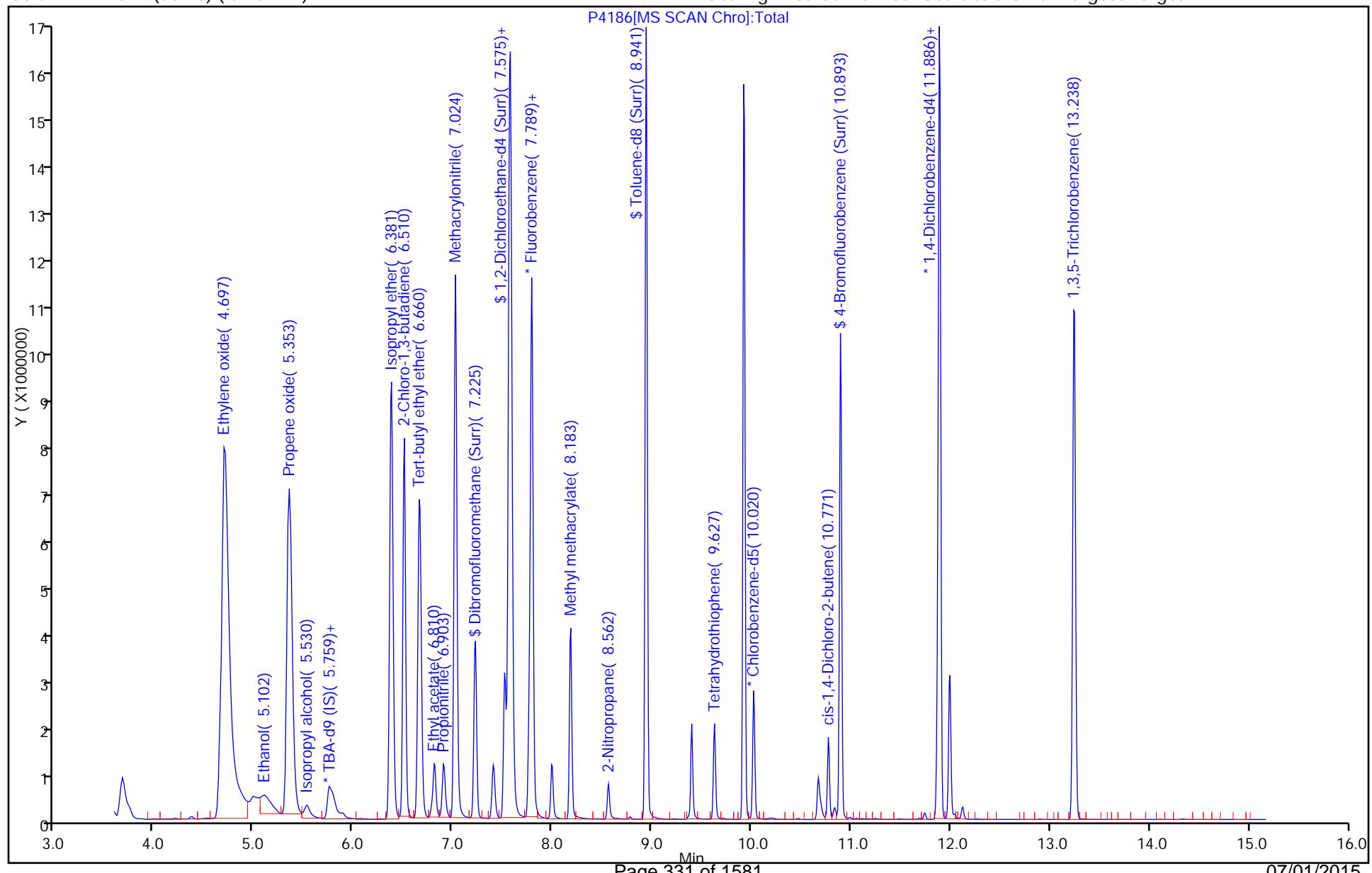
MV-Supp A_00011	Amount Added: 30.00	Units: uL
MV-ARCH SS A_00035	Amount Added: 4.80	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 18-May-2015 11:51:02

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Injection Date: 16-May-2015 16:09:30 Instrument ID: VMS_P
 Lims ID: ic Operator ID: CONTRERASE
 Client ID:
 Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 25
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD003 280-279915/12	P4781.D
Level 2	STD010 280-279915/13	P4782.D
Level 3	STD020 280-279915/14	P4783.D
Level 4	STD050 280-279915/15	P4784.D
Level 5	STD10 280-279915/16	P4785.D
Level 6	STD30 280-279915/17	P4786.D
Level 7	STD60 280-279915/18	P4787.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3375 0.4273	0.3468 0.3744	0.3115	0.5128	0.4864	Qua	-0.079	0.4940	-0.001980						1.0000		0.9900
Chloromethane	0.3657 0.3214	0.3419 0.3040	0.3051	0.3949	0.3887	Ave		0.3460			0.1000	11.0		15.0			
Vinyl chloride	0.2959 0.3197	0.3206 0.2922	0.2942	0.3872	0.3799	Ave		0.3271				12.3		30.0			
Bromomethane	0.1913 0.1968	0.2079 0.1799	0.1917	0.2456	0.2401	Ave		0.2076				12.3		15.0			
Chloroethane	0.2067 0.1810	0.2400 0.1705	0.1913	0.2308	0.2238	Ave		0.2063				12.8		15.0			
Dichlorofluoromethane	0.6125 0.5869	0.6928 +++++	0.5735	0.8405	0.6996	Ave		0.6676				15.0		15.0			
Trichlorofluoromethane	0.5830 0.6044	0.6001 0.5506	0.5579	0.7139	0.7112	Ave		0.6173				11.0		15.0			
Ethyl ether	0.1784 0.1810	0.1798 0.1743	0.1713	0.2206	0.2099	Ave		0.1879				10.2		15.0			
Acrolein	0.0106 0.0116	0.0111 0.0122	0.0100	0.0131	0.0136	Ave		0.0118				11.1		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3055 0.3068	0.3106 0.3230	0.2918	0.3705	0.3573	Ave		0.3236				9.0		15.0			
Acetone	0.0833 0.0397	0.0526 0.0394	0.0408	0.0447	0.0467	Lin2	0.0509	0.0402							0.9910		0.9900
1,1-Dichloroethene	0.3399 0.3598	0.3541 0.3697	0.3308	0.4297	0.4159	Ave		0.3714				10.1		30.0			
Iodomethane	0.5247 0.5371	0.5039 0.5390	0.4781	0.6293	0.6192	Ave		0.5473				10.3		15.0			
Methyl acetate	0.0846 0.0928	0.0902 0.0893	0.0860	0.1154	0.1142	Ave		0.0961				13.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.7153 0.7548	0.6819 0.7380	0.6417	0.8993	0.8725	Ave		0.7577				12.6		15.0			
Carbon disulfide	1.3519 1.4359	1.3590 1.4233	1.2447	1.6922	1.6581	Ave		1.4522				11.3		15.0			
t-Butyl alcohol	2.0862 1.3488	1.3214 1.4800	1.4729	1.7825	1.5438	Lin1	1.6707	1.4528							0.9950		0.9900
Methylene Chloride	0.9553 0.3086	0.5003 0.2984	0.3831	0.3991	0.3735	Lin2	0.1896	0.3194							0.9900		0.9900
Acrylonitrile	0.0305 0.0423	0.0379 0.0417	0.0369	0.0505	0.0491	Lin1	-0.022	0.0429							0.9950		0.9900
Methyl tert-butyl ether	0.4424 0.5106	0.4484 0.5116	0.4250	0.5789	0.5802	Ave		0.4996				12.8		15.0			
trans-1,2-Dichloroethene	0.3698 0.3626	0.3574 0.3579	0.3412	0.4455	0.4158	Ave		0.3786				9.9		15.0			
Hexane	2.8965 2.8620	2.7643 2.7776	2.7126	3.4936	3.3499	Ave		2.9795				10.4		15.0			
Vinyl acetate	0.2657 0.3252	0.2662 0.3330	0.2599	0.3533	0.3901	Lin1	-0.064	0.3370							0.9960		0.9900
1,1-Dichloroethane	0.6802 0.6761	0.6854 0.6552	0.6445	0.8309	0.7896	Ave		0.7088				0.1000	10.1	15.0			
2-Butanone (MEK)	+++++ 0.0675	0.0508 0.0675	0.0678	0.0835	0.0783	Lin1	0.0026	0.0690							0.9940		0.9900
sec-Butyl Alcohol	+++++ 1.1781	0.7360 1.2659	0.7638	1.1988	1.2696	Lin1	-18.49	1.2588							0.9980		0.9900
cis-1,2-Dichloroethene	0.3288 0.3519	0.3385 0.3407	0.3198	0.4255	0.4060	Ave		0.3587				11.3		15.0			
2,2-Dichloropropane	0.4742 0.4964	0.4630 0.5007	0.4317	0.5567	0.5471	Ave		0.4957				9.0		15.0			
Bromochloromethane	0.1180 0.1193	0.1146 0.1175	0.1118	0.1451	0.1395	Ave		0.1237				10.6		15.0			
Chloroform	0.5664 0.5836	0.5672 0.5676	0.5382	0.7009	0.6781	Ave		0.6003				10.5		30.0			
Tetrahydrofuran	+++++ 0.0362	0.0324 0.0371	0.0319	0.0413	0.0420	Ave		0.0368				11.6		15.0			
Isobutyl alcohol	0.5279 0.4867	0.5091 0.5483	0.4943	0.6026	0.6294	Ave		0.5426				10.1		15.0			
1,1,1-Trichloroethane	0.4978 0.5619	0.5139 0.5689	0.4945	0.6432	0.6342	Ave		0.5592				11.0		15.0			
Cyclohexane	0.6950 0.7839	0.7299 0.7802	0.6937	0.9346	0.8990	Ave		0.7881				12.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4692 0.5220	0.5081 0.5152	0.4801	0.6394	0.6133	Ave		0.5353				12.2		15.0			
Carbon tetrachloride	0.4242 0.5116	0.4474 0.5197	0.4312	0.5822	0.5713	Ave		0.4982				13.1		15.0			
1,2-Dichloroethane	0.3218 0.3381	0.3212 0.3290	0.3125	0.4019	0.3974	Ave		0.3460				10.8		15.0			
Benzene	1.3679 1.3796	1.4229 1.2775	1.3455	1.7154	1.6569	Ave		1.4522				11.5		15.0			
Trichloroethene	0.3740 0.3717	0.3587 0.3679	0.3357	0.4364	0.4230	Ave		0.3811				9.4		15.0			
2-Pentanone	+++++ 0.0938	0.0692 0.0945	0.0667	0.1021	0.1002	Lin1	-0.106	0.0959							0.9980		0.9900
Methylcyclohexane	0.5477 0.6256	0.5994 0.6120	0.5690	0.7481	0.7181	Ave		0.6314				11.8		15.0			
1,2-Dichloropropane	0.3632 0.3265	0.3252 0.3095	0.3101	0.4043	0.3889	Ave		0.3468				11.1		30.0			
1,4-Dioxane	+++++ 0.0011	0.0004 0.0012	0.0007	0.0014	0.0011	Lin1	-0.014	0.0012							0.9960		0.9900
Dibromomethane	0.0999 0.1157	0.1104 0.1135	0.1015	0.1381	0.1321	Ave		0.1159				12.5		15.0			
Bromodichloromethane	0.3254 0.3830	0.3259 0.3794	0.3128	0.4296	0.4265	Ave		0.3690				13.2		15.0			
2-Chloroethyl vinyl ether	0.0379 0.0914	0.0585 0.0985	0.0568	0.0836	0.0954	Lin1	-0.029	0.0961							0.9970		0.9900
cis-1,3-Dichloropropene	1.3008 1.8323	1.3518 1.7817	1.3659	2.0013	2.0075	Lin1	-0.223	1.8281							0.9970		0.9900
4-Methyl-2-pentanone (MIBK)	0.1012 0.1293	0.1008 0.1286	0.1032	0.1415	0.1463	Lin1	-0.051	0.1310							0.9970		0.9900
Toluene	1.4362 1.4378	1.4364 1.2983	1.3638	1.8036	1.7083	Ave		1.4978				12.4		30.0			
Ethyl methacrylate	0.5148 0.8401	0.5839 0.8395	0.5945	0.8894	0.8913	Lin1	-0.152	0.8488							0.9980		0.9900
trans-1,3-Dichloropropene	0.1923 0.3031	0.2061 0.2991	0.2150	0.3222	0.3293	Lin1	-0.051	0.3047							0.9970		0.9900
1,1,2-Trichloroethane	0.1472 0.1589	0.1467 0.1574	0.1412	0.1894	0.1819	Ave		0.1604				11.5		15.0			
2-Hexanone	0.2767 0.3756	0.3020 0.3723	0.2764	0.3938	0.3980	Lin1	-0.188	0.3769							0.9980		0.9900
1,3-Dichloropropane	1.2486 1.3393	1.2276 1.2559	1.2444	1.6288	1.5545	Ave		1.3570				12.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-69513-1 Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	1.3095 1.2868	1.2470 1.2671	1.1794	1.5444	1.4678	Ave		1.3289				9.8		15.0			
Dibromochloromethane	0.6642 0.8623	0.6333 0.8673	0.6553	0.9372	0.9460	Lin1	-0.111	0.8769							0.9980		0.9900
Ethylene Dibromide	0.4976 0.6322	0.5484 0.6241	0.5422	0.7092	0.7128	Ave		0.6095				13.7		15.0			
1-Chlorohexane	1.6534 2.2354	1.8638 2.1299	1.8337	2.6254	2.5283	Lin1	-0.126	2.2177							0.9940		0.9900
Chlorobenzene	3.7162 3.6932	3.6999 3.4241	3.6074	4.5563	4.3773	Ave		3.8678			0.3000	11.0		15.0			
Ethylbenzene	2.1172 2.3193	2.1800 2.1239	2.0968	2.7865	2.6493	Ave		2.3247				12.1		30.0			
1,1,1,2-Tetrachloroethane	1.0231 1.1922	1.0597 1.1339	0.9889	1.3247	1.3276	Ave		1.1500				12.0		15.0			
m-Xylene & p-Xylene	2.5337 2.7758	2.6271 2.6189	2.5356	3.3950	3.2308	Ave		2.8167				12.5		15.0			
o-Xylene	2.3034 2.5876	2.3414 2.3628	2.3358	3.0823	3.0209	Ave		2.5763				13.1		15.0			
Styrene	3.1326 3.9303	3.2166 3.5370	3.2813	4.5927	4.5149	Lin1	-0.048	3.7793							0.9900		0.9900
Bromoform	0.2571 0.4005	0.3009 0.4068	0.2850	0.4129	0.4247	Lin1	-0.071	0.4079			0.1000				0.9980		0.9900
Isopropylbenzene	4.3490 4.5455	4.4812 3.9522	4.3678	5.7037	5.4206	Ave		4.6886				13.5		15.0			
Cyclohexanone	0.0135 0.0169	0.0123 0.0179	0.0129	0.0175	0.0183	Lin1	-0.112	0.0177							0.9980		0.9900
1,1,2,2-Tetrachloroethane	0.4135 0.4552	0.4569 0.4399	0.3948	0.5532	0.5310	Ave		0.4635			0.3000	12.6		15.0			
trans-1,4-Dichloro-2-butene	0.0853 0.1342	0.1068 0.1346	0.1022	0.1443	0.1444	Lin1	-0.019	0.1361							0.9980		0.9900
1,2,3-Trichloropropane	0.0892 0.1252	0.1272 0.1246	0.1172	0.1566	0.1423	Lin1	-0.002	0.1278							0.9950		0.9900
N-Propylbenzene	1.1821 1.3308	1.2313 1.2406	1.1995	1.6304	1.5457	Ave		1.3372				13.4		15.0			
Bromobenzene	0.8064 0.8680	0.8370 0.8164	0.8033	1.0695	1.0135	Ave		0.8877				12.2		15.0			
1,3,5-Trimethylbenzene	3.2522 3.7614	3.4166 3.3518	3.4585	4.6481	4.4250	Ave		3.7591				14.8		15.0			
2-Chlorotoluene	1.0066 1.0508	1.0091 0.9887	1.0033	1.3162	1.2307	Ave		1.0865				12.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	0.9299 1.0695	0.9816 1.0062	0.9743	1.2770	1.2286	Ave		1.0667				12.6		15.0			
tert-Butylbenzene	3.3263 3.8741	3.5208 3.5884	3.5361	4.7128	4.4860	Ave		3.8635				13.8		15.0			
1,2,4-Trimethylbenzene	3.1847 3.7806	3.5884 3.3883	3.5290	4.6755	4.4964	Ave		3.8061				14.9		15.0			
sec-Butylbenzene	0.8935 1.1105	1.0124 1.0720	0.9882	1.3294	1.2966	Ave		1.1004				14.6		15.0			
4-Isopropyltoluene	3.6809 4.3085	4.0123 3.8496	4.0422	5.3249	5.0995	Ave		4.3311				14.7		15.0			
1,3-Dichlorobenzene	1.8905 1.8599	1.8562 1.7675	1.7496	2.2872	2.1686	Ave		1.9399				10.6		15.0			
1,4-Dichlorobenzene	1.9847 1.8100	1.8495 1.6975	1.8243	2.2472	2.1239	Ave		1.9339				10.1		15.0			
n-Butylbenzene	3.7101 4.3151	4.1372 3.8644	4.0749	5.3609	5.1168	Ave		4.3685				14.4		15.0			
1,2-Dichlorobenzene	1.6247 1.5482	1.5206 1.4745	1.4682	1.8819	1.8096	Ave		1.6182				10.2		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0660	0.0466 0.0732	0.0533	0.0701	0.0733	Lin2	-0.027	0.0722							0.9950		0.9900
1,2,4-Trichlorobenzene	1.0209 1.1433	0.9736 1.1210	0.9564	1.3245	1.3012	Ave		1.1201				13.3		15.0			
Hexachlorobutadiene	0.8435 0.8356	0.8092 0.8172	0.7741	0.9777	0.9420	Ave		0.8570				8.7		15.0			
Naphthalene	1.3668 1.5213	1.2971 1.5126	1.2503	1.7373	1.7592	Ave		1.4921				13.5		15.0			
1,2,3-Trichlorobenzene	0.8342 0.8985	0.7695 0.8783	0.7643	1.0277	1.0313	Ave		0.8862				12.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD003 280-279915/12	P4781.D
Level 2	STD010 280-279915/13	P4782.D
Level 3	STD020 280-279915/14	P4783.D
Level 4	STD050 280-279915/15	P4784.D
Level 5	STD10 280-279915/16	P4785.D
Level 6	STD30 280-279915/17	P4786.D
Level 7	STD60 280-279915/18	P4787.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Qua	15938 2032653	52914 3792144	95218	391261	667147	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	17271 1528652	52156 3078991	93287	301301	533225	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	13976 1520432	48908 2959094	89944	295419	521151	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	9035 936137	31722 1821909	58612	187382	329400	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	9763 860851	36616 1726725	58497	176134	306979	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	28924 2791449	105689 +++++	175330	641280	959587	0.300 30.0	1.00 +++++	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	27532 2875046	91552 5576899	170551	544702	975572	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl ether	FB	Ave	8427 860722	27430 1765498	52383	168338	287940	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	5015 552368	16988 1234962	30633	99900	186748	3.00 300	10.00 600	20.0	50.0	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	14427 1459375	47380 3271169	89197	282651	490067	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acetone	FB	Lin2	15733 754589	32073 1596918	49928	136474	256421	1.20 120	4.00 240	8.00	20.0	40.0
1,1-Dichloroethene	FB	Ave	16053 1711428	54024 3744718	101135	327868	570508	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Iodomethane	FB	Ave	24779 2554904	76880 5459266	146173	480165	849270	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	19973 2206304	68794 4522747	131429	440427	783349	1.50 150	5.00 300	10.0	25.0	50.0
3-Chloro-1-propene	FB	Ave	33782 3590235	104029 7475034	196194	686176	1196797	0.300 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Carbon disulfide	FB	Ave	63844 6829796	207326 14416049	380538	1291128	2274362	0.300 30.0	1.00 60.0	2.00	5.00	10.0
t-Butyl alcohol	TBA	Lin1	5461 449481	12296 1047287	28834	88201	143506	3.00 300	10.0 600	20.0	50.0	100
Methylene Chloride	FB	Lin2	45114 1467807	76317 3021861	117129	304531	512366	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acrylonitrile	FB	Lin1	14396 2011847	57766 4221720	112910	385509	673992	3.00 300	10.0 600	20.0	50.0	100
Methyl tert-butyl ether	FB	Ave	20894 2428836	68406 5181432	129936	441670	795805	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	17466 1724662	54526 3624908	104314	339922	570283	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBZ	Ave	30434 3163783	97470 6592047	187863	620758	1064073	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Lin1	25099 3093908	81222 6745539	158891	539165	1070266	0.600 60.0	2.00 120	4.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	32123 3215705	104562 6636400	197037	634000	1083019	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Butanone (MEK)	FB	Lin1	+++++ 1283973	31015 2733622	82957	254870	429457	+++++ 120	4.00 240	8.00	20.0	40.0
sec-Butyl Alcohol	TBA	Lin1	+++++ 1177843	20547 2687359	44860	177958	354048	+++++ 900	30.0 1800	60.0	150	300
cis-1,2-Dichloroethene	FB	Ave	15526 1673834	51648 3451041	97764	324629	556869	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	22395 2361256	70637 5070804	131969	424779	750372	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromochloromethane	FB	Ave	5572 567624	17490 1190411	34170	110739	191317	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroform	FB	Ave	26749 2775914	86525 5748805	164543	534777	930171	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 344261	9892 752088	19495	63043	115097	+++++ 60.0	2.00 120	4.00	10.0	20.0
Isobutyl alcohol	TBA	Ave	3455 405503	11843 969974	24190	74546	146260	7.50 750	25.0 1500	50.0	125	250
1,1,1-Trichloroethane	FB	Ave	23507 2672460	78394 5762174	151171	490728	869854	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	32824 3728779	111354 7902223	212079	713094	1233109	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	22160 2482846	77518 5217651	146778	487869	841174	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	20033 2433470	68251 5264124	131833	444189	783595	0.300 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	15199 1608335	49002 3331891	95551	306647	545089	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Benzene	FB	Ave	64601 6562105	217069 12938608	411344	1308785	2272739	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	17665 1767915	54727 3725890	102637	333002	580229	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Lin1	+++++ 1785514	42257 3830284	81558	311672	549680	+++++ 120	4.00 240	8.00	20.0	40.0
Methylcyclohexane	FB	Ave	25867 2975726	91444 6198380	173969	570820	984962	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	17151 1553163	49616 3135182	94800	308442	533381	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dioxane	FB	Lin1	+++++ 108574	1363 248210	4422	20792	31149	+++++ 600	20.0 1200	40.0	100	200
Dibromomethane	FB	Ave	4720 550424	16836 1149242	31034	105334	181158	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromodichloromethane	FB	Ave	15367 1821783	49724 3842384	95636	327782	585066	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Lin1	1789 434669	8931 997613	17360	63804	130856	0.300 30.0	1.00 60.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBZ	Lin1	13668 2025485	47664 4228488	94600	355599	637678	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Lin1	19125 2459291	61500 5209341	126189	431891	802526	1.20 120	4.00 240	8.00	20.0	40.0
Toluene	FB	Ave	67826 6838716	219127 13149891	416933	1376080	2343272	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Lin1	5409 928658	20588 1992402	41173	158034	283131	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Lin1	9082 1441543	31442 3029705	65740	245862	451655	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Ave	6954 755862	22376 1594239	43166	144502	249558	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Hexanone	CBZ	Lin1	11628 1660845	42588 3534346	76567	279891	505643	1.20 120	4.00 240	8.00	20.0	40.0
1,3-Dichloropropane	CBZ	Ave	13119 1480481	43286 2980536	86182	289409	493791	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	13759 1422458	43968 3007241	81684	274413	466238	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dibromochloromethane	CBZ	Lin1	6979 953194	22330 2058463	45381	166535	300488	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylene Dibromide	CBZ	Ave	5228 698844	19338 1481137	37552	126008	226416	0.300 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBZ	Lin1	17372 2471142	65718 5055022	126999	466503	803114	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chlorobenzene	CBZ	Ave	39046 4082618	130456 8126373	249834	809589	1390431	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	22246 2563883	76867 5040569	145220	495132	841547	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	10750 1317909	37366 2691138	68486	235381	421712	0.300 30.0	1.00 60.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBZ	Ave	26622 3068481	92630 6215565	175608	603254	1026243	0.300 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	24202 2860455	82558 5607681	161771	547680	959589	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBZ	Lin1	32915 4344694	113417 8394407	227252	816065	1434156	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBZ	Lin1	2701 442747	10610 965354	19738	73360	134904	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Ave	69392 7863636	236691 14591537	461747	1541154	2670191	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexanone	CBZ	Lin1	5669 749142	17300 1700543	35719	124670	232106	12.0 1200	40.0 2400	80.0	200	400
1,1,2,2-Tetrachloroethane	DCB	Ave	6597 787475	24133 1624182	41740	149468	261553	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Lin1	1361 232220	5639 496877	10804	39000	71155	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Lin1	1423 216572	6720 459999	12394	42313	70097	0.300 30.0	1.00 60.0	2.00	5.00	10.0
N-Propylbenzene	DCB	Ave	18862 2302304	65036 4580199	126803	440526	761396	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromobenzene	DCB	Ave	12866 1501575	44209 3014124	84926	288982	499271	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	51891 6507212	180460 12374780	365612	1255912	2179766	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	16061 1817800	53302 3650294	106067	355645	606265	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	14837 1850307	51846 3714797	102996	345054	605207	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	53073 6702128	185967 13248365	373816	1273391	2209801	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	50815 6540492	189535 12509487	373071	1263329	2214940	0.300 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	14256 1921156	53473 3957928	104472	359215	638715	0.300 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Analy Batch No.: 279915

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2015 12:15 Calibration End Date: 06/02/2015 14:13 Calibration ID: 22477

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Isopropyltoluene	DCB	Ave	58732 7453710	211928 14212577	427326	1438787	2512036	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	30164 3217605	98044 6525666	184960	617996	1068257	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCB	Ave	31667 3131372	97690 6267171	192851	607194	1046247	0.300 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	59197 7465140	218522 14267238	430776	1448527	2520526	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	25923 2678357	80319 5443917	155214	508478	891402	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Lin2	+++++ 114161	2461 270403	5639	18941	36102	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	16290 1977910	51423 4138644	101110	357868	640959	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Ave	13459 1445636	42742 3017081	81837	264167	464020	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCB	Ave	21808 2631844	68513 5584485	132175	469422	866586	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Ave	13311 1554331	40645 3242509	80795	277682	508012	0.300 30.0	1.00 60.0	2.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4781.D
 Lims ID: STD003
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 02-Jun-2015 12:15:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD003
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_V MSP_8260*sub70

Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_V MSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:36 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj Date: 02-Jun-2015 13:03:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.793	5.800	-0.007	93	218144	250.0	250.0	
* 1 Fluorobenzene	96	7.774	7.773	0.001	98	1967766	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.033	-0.007	89	437795	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.878	11.878	0.000	97	664823	12.5	12.5	
23 Dichlorodifluoromethane	85	4.001	4.013	-0.012	97	15938	0.3000	0.3659	
26 Chloromethane	50	4.238	4.250	-0.012	94	17271	0.3000	0.3171	
27 Vinyl chloride	62	4.392	4.390	0.002	73	13976	0.3000	0.2714	
29 Bromomethane	94	4.755	4.767	-0.012	97	9035	0.3000	0.2764	
30 Chloroethane	64	4.825	4.837	-0.012	98	9763	0.3000	0.3006	
31 Dichlorofluoromethane	67	4.992	5.004	-0.012	98	28924	0.3000	0.2752	
32 Trichlorofluoromethane	101	5.104	5.102	0.002	96	27532	0.3000	0.2833	M
35 Ethyl ether	59	5.258	5.243	0.015	93	8427	0.3000	0.2849	
39 Acrolein	56	5.397	5.411	-0.014	4	5015	3.00	2.71	
40 1,1,2-Trichloro-1,2,2-trif	151	5.495	5.495	0.000	94	14427	0.3000	0.2832	
41 Acetone	43	5.522	5.528	-0.006	64	15733	1.20	1.22	
43 1,1-Dichloroethene	96	5.558	5.550	0.008	93	16053	0.3000	0.2745	
44 Iodomethane	142	5.729	5.729	0.000	98	24779	0.3000	0.2876	
45 Methyl acetate	43	5.758	5.751	0.007	97	19973	1.50	1.32	
47 3-Chloro-1-propene	41	5.808	5.801	0.007	43	33782	0.3000	0.2832	
48 Carbon disulfide	76	5.822	5.844	-0.022	99	63844	0.3000	0.2793	
49 2-Methyl-2-propanol	59	5.865	5.851	0.014	90	5461	3.00	3.16	
50 Methylene Chloride	84	5.915	5.908	0.007	97	45114	0.3000	0.3037	
52 Acrylonitrile	53	6.079	6.065	0.014	84	14396	3.00	2.65	
51 Methyl tert-butyl ether	73	6.072	6.072	0.000	92	20894	0.3000	0.2657	
53 trans-1,2-Dichloroethene	96	6.122	6.123	0.000	95	17466	0.3000	0.2931	
54 Hexane	57	6.280	6.273	0.007	94	30434	0.3000	0.2916	
55 Vinyl acetate	43	6.394	6.380	0.014	98	25099	0.6000	0.6624	
57 1,1-Dichloroethane	63	6.451	6.444	0.007	96	32123	0.3000	0.2879	
61 2-Butanone (MEK)	43		6.844				ND	ND	
62 sec-Butyl Alcohol	45		6.880				ND	ND	
63 cis-1,2-Dichloroethene	96	6.887	6.888	-0.001	86	15526	0.3000	0.2749	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.916	6.909	0.007	79	22395	0.3000	0.2870	
67 Chlorobromomethane	128	7.095	7.088	0.007	58	5572	0.3000	0.2861	
68 Chloroform	83	7.102	7.095	0.007	95	26749	0.3000	0.2831	
69 Tetrahydrofuran	42		7.116				ND	ND	
70 Isobutyl alcohol	41	7.309	7.295	0.014	33	3455	7.50	7.30	
71 1,1,1-Trichloroethane	97	7.309	7.302	0.007	95	23507	0.3000	0.2670	
72 Cyclohexane	56	7.374	7.374	0.000	91	32824	0.3000	0.2646	
73 1,1-Dichloropropene	75	7.417	7.410	0.007	95	22160	0.3000	0.2630	
74 Carbon tetrachloride	117	7.445	7.445	0.000	96	20033	0.3000	0.2554	
76 1,2-Dichloroethane	62	7.588	7.581	0.007	27	15199	0.3000	0.2790	a
77 Benzene	78	7.595	7.595	0.000	97	64601	0.3000	0.2826	
14 n-Heptane	43	7.653	7.653	0.000	93	32789	0.3000	0.2638	
79 Trichloroethene	95	8.060	8.053	0.007	95	17665	0.3000	0.2945	
80 2-Pentanone	43		8.103				ND	ND	
82 Methylcyclohexane	55	8.239	8.232	0.007	90	25867	0.3000	0.2602	
83 1,2-Dichloropropane	63	8.253	8.246	0.007	72	17151	0.3000	0.3141	
84 1,4-Dioxane	88		8.296				ND	ND	
85 Dibromomethane	93	8.353	8.346	0.007	91	4720	0.3000	0.2588	
86 Dichlorobromomethane	83	8.418	8.418	0.000	95	15367	0.3000	0.2646	
87 2-Chloroethyl vinyl ether	63	8.561	8.546	0.015	69	1789	0.3000	0.4208	
89 cis-1,3-Dichloropropene	75	8.732	8.725	0.007	91	13668	0.3000	0.3354	
90 4-Methyl-2-pentanone (MIBK)	43	8.789	8.782	0.007	98	19125	1.20	1.32	
91 Toluene	91	8.997	8.997	0.000	98	67826	0.3000	0.2877	
92 Ethyl methacrylate	69	9.083	9.076	0.007	90	5409	0.3000	0.3611	
93 trans-1,3-Dichloropropene	75	9.104	9.097	0.007	94	9082	0.3000	0.3575	
94 1,1,2-Trichloroethane	97	9.268	9.261	0.007	89	6954	0.3000	0.2754	
95 2-Hexanone	43	9.376	9.375	0.001	95	11628	1.20	1.38	
96 1,3-Dichloropropane	76	9.397	9.397	0.000	76	13119	0.3000	0.2760	
97 Tetrachloroethene	164	9.411	9.404	0.007	93	13759	0.3000	0.2956	
98 Chlorodibromomethane	129	9.590	9.590	0.000	83	6979	0.3000	0.3533	
100 Ethylene Dibromide	107	9.719	9.719	0.000	94	5228	0.3000	0.2449	
101 1-Chlorohexane	91	9.926	9.926	0.000	81	17372	0.3000	0.2806	
102 Chlorobenzene	112	10.055	10.048	0.007	97	39046	0.3000	0.2882	
103 Ethylbenzene	106	10.084	10.077	0.007	97	22246	0.3000	0.2732	
104 1,1,2-Tetrachloroethane	131	10.091	10.084	0.007	43	10750	0.3000	0.2669	
105 m-Xylene & p-Xylene	106	10.162	10.155	0.007	99	26622	0.3000	0.2699	
107 o-Xylene	106	10.477	10.477	0.000	96	24202	0.3000	0.2682	
106 Styrene	104	10.484	10.477	0.007	92	32915	0.3000	0.2614	
108 Bromoform	173	10.691	10.691	0.000	91	2701	0.3000	0.3629	
109 Isopropylbenzene	105	10.734	10.734	0.000	97	69392	0.3000	0.2783	
111 Cyclohexanone	55	10.892	10.891	0.001	36	5669	12.0	15.5	
112 1,1,2,2-Tetrachloroethane	83	10.963	10.956	0.007	89	6597	0.3000	0.2676	
113 trans-1,4-Dichloro-2-butene	53	10.992	10.992	0.000	1	1361	0.3000	0.3311	
114 1,2,3-Trichloropropene	110	11.035	11.027	0.008	81	1423	0.3000	0.2280	
115 N-Propylbenzene	120	11.063	11.056	0.007	99	18862	0.3000	0.2652	
116 Bromobenzene	156	11.077	11.070	0.007	96	12866	0.3000	0.2725	
117 1,3,5-Trimethylbenzene	105	11.170	11.163	0.007	92	51891	0.3000	0.2595	
118 2-Chlorotoluene	126	11.192	11.185	0.007	96	16061	0.3000	0.2779	
119 4-Chlorotoluene	126	11.270	11.263	0.007	98	14837	0.3000	0.2615	
120 tert-Butylbenzene	119	11.471	11.471	0.000	94	53073	0.3000	0.2583	
121 1,2,4-Trimethylbenzene	105	11.506	11.499	0.007	95	50815	0.3000	0.2510	
122 sec-Butylbenzene	134	11.657	11.650	0.007	95	14256	0.3000	0.2436	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.742	11.743	0.000	97	58732	0.3000	0.2550	
124 1,3-Dichlorobenzene	146	11.828	11.828	0.000	97	30164	0.3000	0.2924	
126 1,4-Dichlorobenzene	146	11.900	11.893	0.007	92	31667	0.3000	0.3079	
127 n-Butylbenzene	91	12.121	12.114	0.007	99	59197	0.3000	0.2548	
128 1,2-Dichlorobenzene	146	12.272	12.264	0.008	86	25923	0.3000	0.3012	
129 1,2-Dibromo-3-Chloropropan	157		13.044				ND	ND	
130 1,2,4-Trichlorobenzene	180	14.023	14.009	0.014	94	16290	0.3000	0.2734	
131 Hexachlorobutadiene	225	14.152	14.152	0.000	89	13459	0.3000	0.2953	
132 Naphthalene	128	14.402	14.395	0.007	95	21808	0.3000	0.2748	
133 1,2,3-Trichlorobenzene	180	14.731	14.724	0.007	93	13311	0.3000	0.2824	
S 140 1,2-Dichloroethene, Total	96				0		0.6000	0.5680	
S 138 1,2-Dichloroethene, Total	1				0		0.6000	0.5680	
S 139 Xylenes, Total	106				0		0.6000	0.5381	
S 137 1,3-Dichloropropene, Total	1				0		0.6000	0.6929	
S 134 Trihalomethanes, Total	1				0		1.20	1.26	
S 135 Xylenes, Total (URS)	1				0		0.6000	0.5381	
S 136 Total BTEX	1				0			1.38	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-2cleve+AVA_00010	Amount Added: 0.15	Units: uL
MV-Gas/Ket A_00033	Amount Added: 0.15	Units: uL
MV-Main A_00022	Amount Added: 0.15	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

TestAmerica Denver

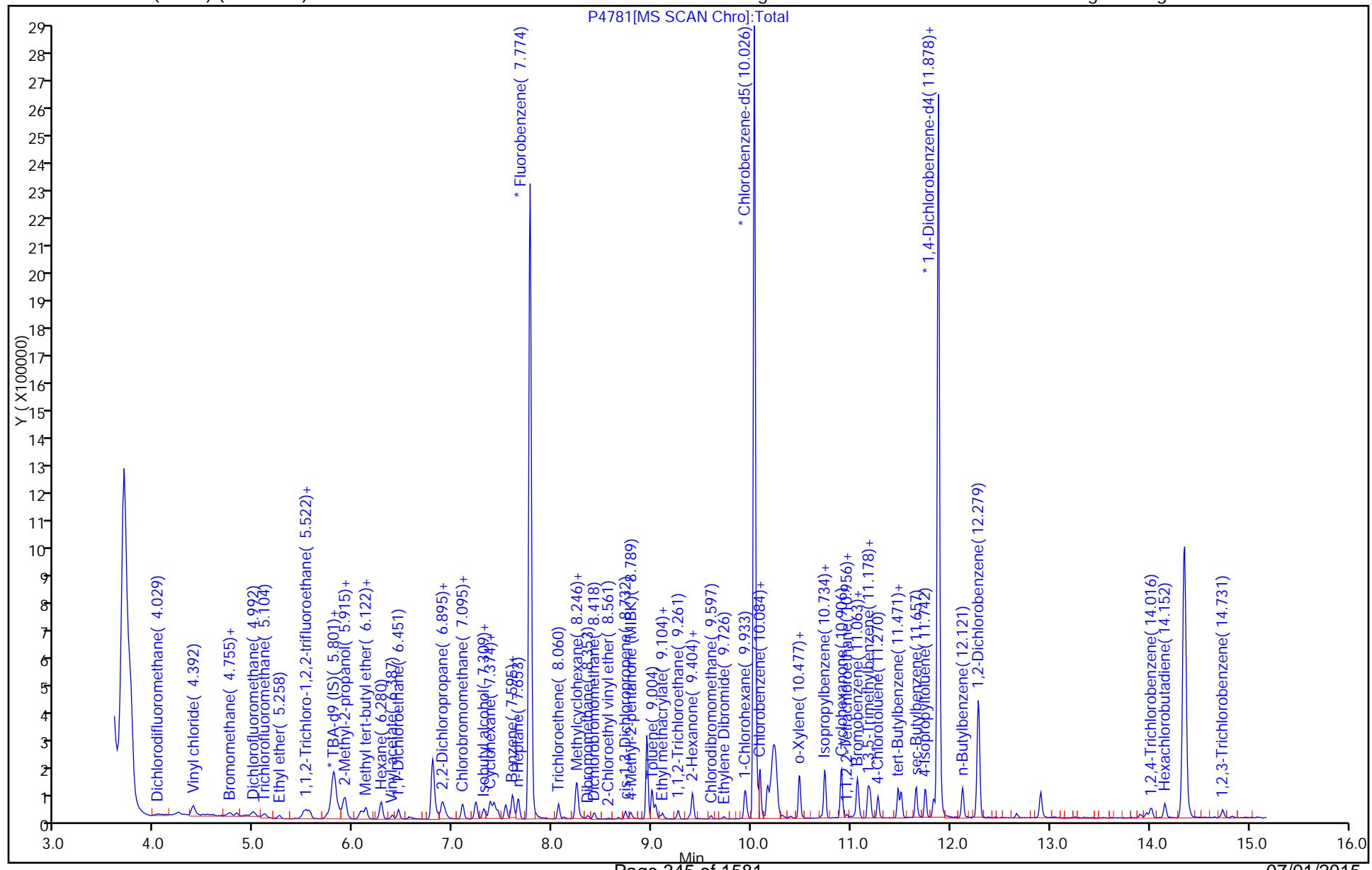
Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4781.D
 Injection Date: 02-Jun-2015 12:15:30
 Lims ID: STD003
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: SEIFERTJ
Worklist Smp#: 12Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 11

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



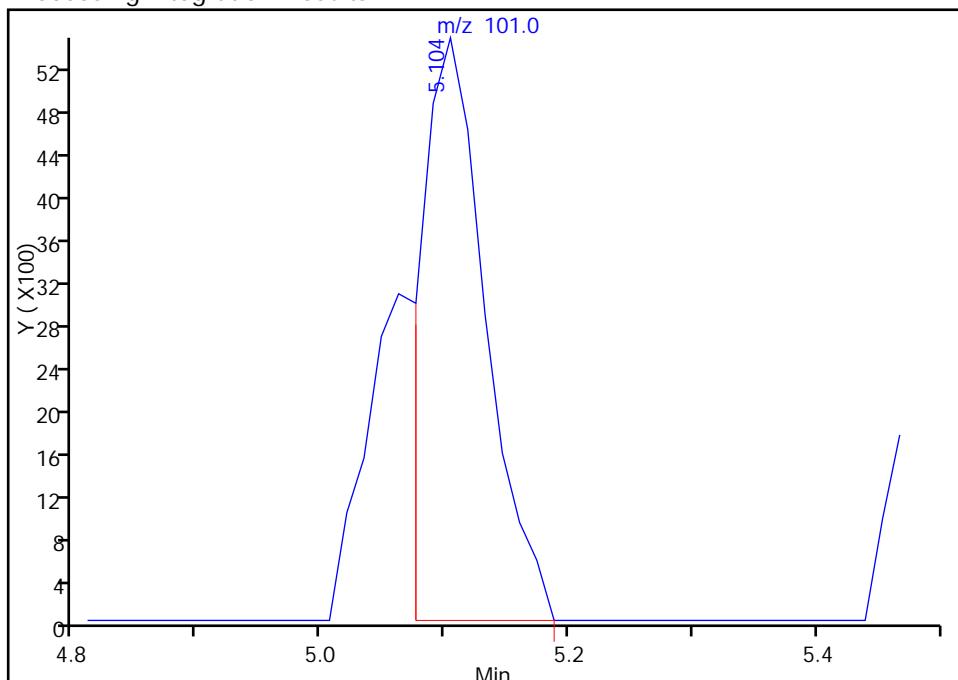
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4781.D
 Injection Date: 02-Jun-2015 12:15:30 Instrument ID: VMS_P
 Lims ID: STD003
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

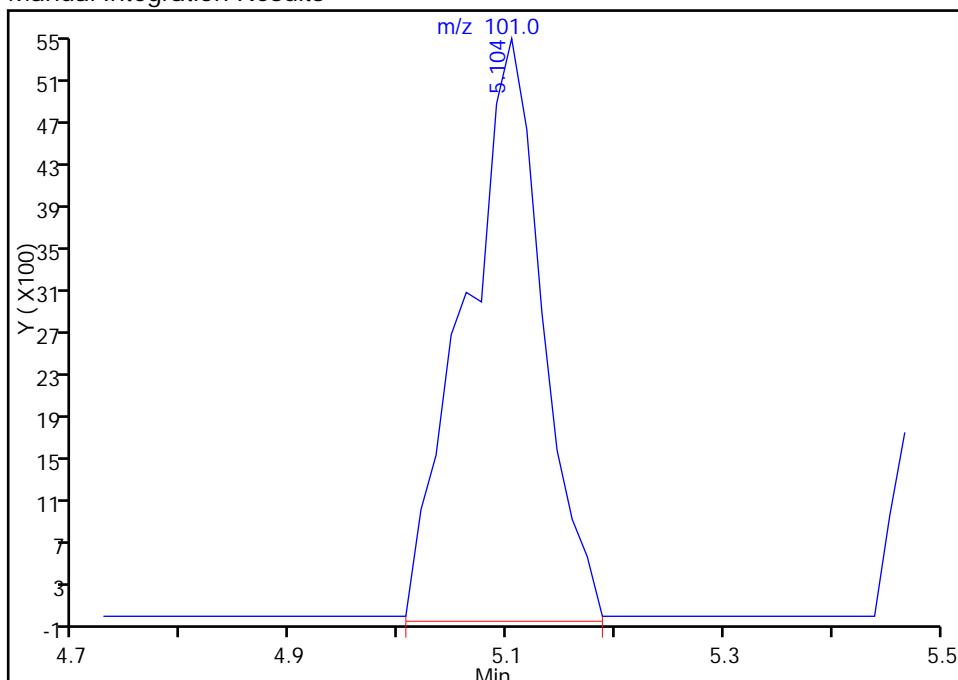
RT: 5.10
 Area: 20034
 Amount: 0.300000
 Amount Units: ug/l

Processing Integration Results



RT: 5.10
 Area: 27532
 Amount: 0.283316
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 02-Jun-2015 13:03:51

Audit Action: Manually Integrated

Audit Reason: Split Peak

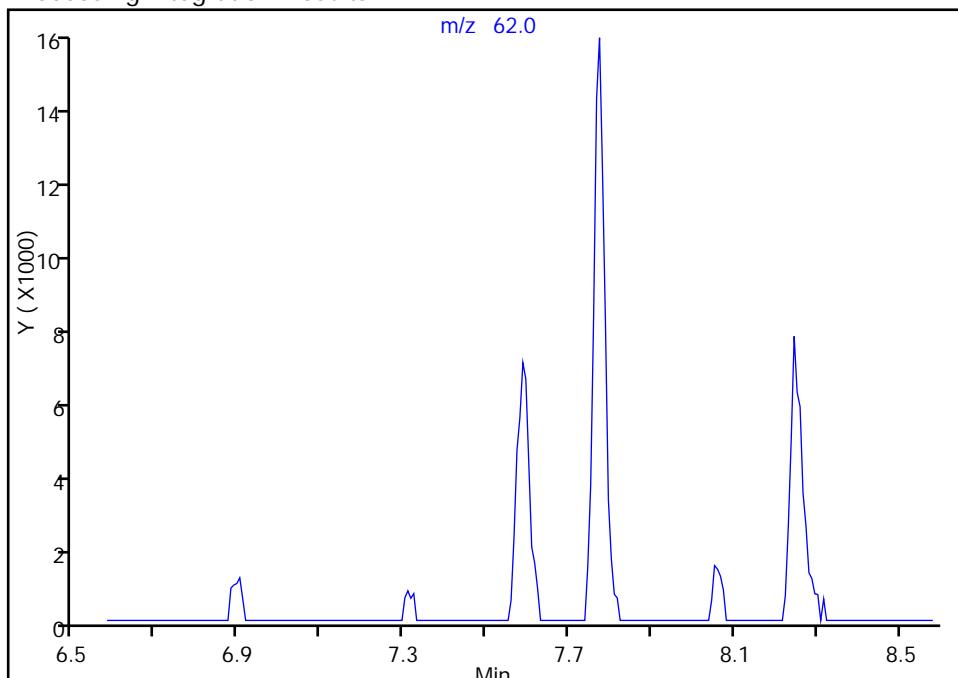
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4781.D
 Injection Date: 02-Jun-2015 12:15:30 Instrument ID: VMS_P
 Lims ID: STD003
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

76 1,2-Dichloroethane, CAS: 107-06-2

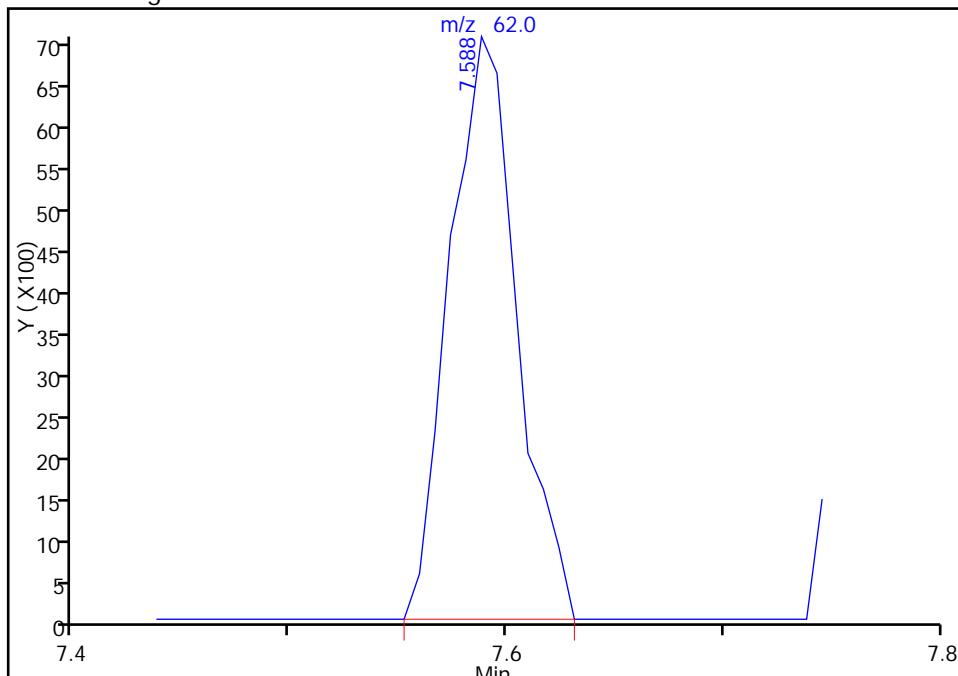
Not Detected
 Expected RT: 7.58

Processing Integration Results



Manual Integration Results

RT: 7.59
 Area: 15199
 Amount: 0.279049
 Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2015 13:03:51

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4782.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 02-Jun-2015 12:35:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD010
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_V MSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_V MSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:38 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj Date: 02-Jun-2015 13:05:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.786	5.800	-0.014	95	232629	250.0	250.0	
* 1 Fluorobenzene	96	7.774	7.773	0.001	98	1906960	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.033	-0.007	89	440746	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.878	-0.007	97	660237	12.5	12.5	
23 Dichlorodifluoromethane	85	4.013	4.013	0.000	99	52914	1.00	0.8655	
26 Chloromethane	50	4.237	4.250	-0.013	99	52156	1.00	0.9882	
27 Vinyl chloride	62	4.390	4.390	0.000	82	48908	1.00	0.9801	
29 Bromomethane	94	4.753	4.767	-0.014	94	31722	1.00	1.00	
30 Chloroethane	64	4.823	4.837	-0.014	98	36616	1.00	1.16	
31 Dichlorofluoromethane	67	4.991	5.004	-0.013	98	105689	1.00	1.04	
32 Trichlorofluoromethane	101	5.102	5.102	0.000	100	91552	1.00	0.9722	
35 Ethyl ether	59	5.256	5.243	0.013	94	27430	1.00	0.9568	
39 Acrolein	56	5.410	5.411	-0.001	95	16988	10.0	9.47	
40 1,1,2-Trichloro-1,2,2-trif	151	5.494	5.495	-0.001	93	47380	1.00	0.9597	
41 Acetone	43	5.536	5.528	0.008	39	32073	4.00	3.97	
43 1,1-Dichloroethene	96	5.550	5.550	0.000	98	54024	1.00	0.9534	
44 Iodomethane	142	5.729	5.729	0.000	99	76880	1.00	0.9207	
45 Methyl acetate	43	5.750	5.751	-0.001	97	68794	5.00	4.69	
47 3-Chloro-1-propene	41	5.807	5.801	0.006	86	104029	1.00	0.9000	
48 Carbon disulfide	76	5.815	5.844	-0.029	99	207326	1.00	0.9359	
49 2-Methyl-2-propanol	59	5.857	5.851	0.006	36	12296	10.0	7.95	
50 Methylene Chloride	84	5.907	5.908	-0.001	97	76317	1.00	0.9728	
52 Acrylonitrile	53	6.072	6.065	0.007	96	57766	10.0	9.34	
51 Methyl tert-butyl ether	73	6.072	6.072	0.000	95	68406	1.00	0.8975	
53 trans-1,2-Dichloroethene	96	6.122	6.123	0.000	93	54526	1.00	0.9440	
54 Hexane	57	6.279	6.273	0.006	94	97470	1.00	0.9278	
55 Vinyl acetate	43	6.387	6.380	0.007	97	81222	2.00	1.77	
57 1,1-Dichloroethane	63	6.451	6.444	0.007	97	104562	1.00	0.9669	
61 2-Butanone (MEK)	43	6.837	6.844	-0.007	97	31015	4.00	2.91	
62 sec-Butyl Alcohol	45	6.887	6.880	0.007	44	20547	30.0	32.2	
63 cis-1,2-Dichloroethene	96	6.887	6.888	-0.001	87	51648	1.00	0.9437	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.909	6.909	-0.001	83	70637	1.00	0.9341	
67 Chlorobromomethane	128	7.087	7.088	-0.001	94	17490	1.00	0.9268	
68 Chloroform	83	7.094	7.095	-0.001	94	86525	1.00	0.9448	
69 Tetrahydrofuran	42	7.116	7.116	0.000	72	9892	2.00	1.76	
70 Isobutyl alcohol	41	7.302	7.295	0.007	35	11843	25.0	23.5	
71 1,1,1-Trichloroethane	97	7.302	7.302	0.000	97	78394	1.00	0.9190	
72 Cyclohexane	56	7.373	7.374	-0.001	95	111354	1.00	0.9262	
73 1,1-Dichloropropene	75	7.409	7.410	-0.001	96	77518	1.00	0.9492	
74 Carbon tetrachloride	117	7.445	7.445	0.000	97	68251	1.00	0.8979	
76 1,2-Dichloroethane	62	7.581	7.581	0.000	97	49002	1.00	0.9283	
77 Benzene	78	7.595	7.595	0.000	97	217069	1.00	0.9798	
14 n-Heptane	43	7.652	7.653	-0.001	94	112255	1.00	0.9321	
79 Trichloroethene	95	8.060	8.053	0.007	98	54727	1.00	0.9414	
80 2-Pentanone	43	8.110	8.103	0.007	98	42257	4.00	3.99	
82 Methylcyclohexane	55	8.231	8.232	-0.001	95	91444	1.00	0.9493	
83 1,2-Dichloropropane	63	8.246	8.246	0.000	87	49616	1.00	0.9378	
84 1,4-Dioxane	88	8.303	8.296	0.007	24	1363	20.0	18.8	
85 Dibromomethane	93	8.353	8.346	0.007	92	16836	1.00	0.9524	
86 Dichlorobromomethane	83	8.417	8.418	-0.001	98	49724	1.00	0.8834	
87 2-Chloroethyl vinyl ether	63	8.553	8.546	0.007	89	8931	1.00	0.9116	
89 cis-1,3-Dichloropropene	75	8.725	8.725	0.000	91	47664	1.00	0.8614	
90 4-Methyl-2-pentanone (MIBK)	43	8.782	8.782	0.000	99	61500	4.00	3.47	
91 Toluene	91	8.996	8.997	-0.001	97	219127	1.00	0.9590	
92 Ethyl methacrylate	69	9.075	9.076	-0.001	89	20588	1.00	0.8670	
93 trans-1,3-Dichloropropene	75	9.104	9.097	0.007	98	31442	1.00	0.8446	
94 1,1,2-Trichloroethane	97	9.261	9.261	0.000	92	22376	1.00	0.9145	
95 2-Hexanone	43	9.368	9.375	-0.007	94	42588	4.00	3.70	
96 1,3-Dichloropropane	76	9.397	9.397	0.000	97	43286	1.00	0.9047	
97 Tetrachloroethene	164	9.404	9.404	0.000	91	43968	1.00	0.9384	
98 Chlorodibromomethane	129	9.590	9.590	0.000	89	22330	1.00	0.8482	
100 Ethylene Dibromide	107	9.719	9.719	-0.001	98	19338	1.00	0.8998	
101 1-Chlorohexane	91	9.926	9.926	0.000	84	65718	1.00	0.8973	
102 Chlorobenzene	112	10.047	10.048	-0.001	97	130456	1.00	0.9566	
103 Ethylbenzene	106	10.076	10.077	-0.001	97	76867	1.00	0.9378	
104 1,1,2-Tetrachloroethane	131	10.083	10.084	-0.001	91	37366	1.00	0.9215	
105 m-Xylene & p-Xylene	106	10.155	10.155	0.000	98	92630	1.00	0.9327	
107 o-Xylene	106	10.476	10.477	-0.001	95	82558	1.00	0.9088	
106 Styrene	104	10.476	10.477	-0.001	89	113417	1.00	0.8639	
108 Bromoform	173	10.691	10.691	0.000	91	10610	1.00	0.9115	
109 Isopropylbenzene	105	10.734	10.734	0.000	97	236691	1.00	0.9558	
111 Cyclohexanone	55	10.884	10.891	-0.007	49	17300	40.0	34.1	
112 1,1,2,2-Tetrachloroethane	83	10.955	10.956	-0.001	95	24133	1.00	0.9858	
113 trans-1,4-Dichloro-2-butene	53	10.984	10.992	-0.008	63	5639	1.00	0.9274	
114 1,2,3-Trichloropropane	110	11.027	11.027	0.000	74	6720	1.00	1.01	
115 N-Propylbenzene	120	11.056	11.056	0.000	99	65036	1.00	0.9208	
116 Bromobenzene	156	11.070	11.070	0.000	97	44209	1.00	0.9428	
117 1,3,5-Trimethylbenzene	105	11.170	11.163	0.007	94	180460	1.00	0.9089	
118 2-Chlorotoluene	126	11.184	11.185	-0.001	95	53302	1.00	0.9288	
119 4-Chlorotoluene	126	11.270	11.263	0.007	99	51846	1.00	0.9202	
120 tert-Butylbenzene	119	11.470	11.471	-0.001	94	185967	1.00	0.9113	
121 1,2,4-Trimethylbenzene	105	11.499	11.499	0.000	96	189535	1.00	0.9428	
122 sec-Butylbenzene	134	11.649	11.650	-0.001	95	53473	1.00	0.9200	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.742	11.743	0.000	97	211928	1.00	0.9264	
124 1,3-Dichlorobenzene	146	11.828	11.828	0.000	98	98044	1.00	0.9569	
126 1,4-Dichlorobenzene	146	11.899	11.893	0.006	92	97690	1.00	0.9564	
127 n-Butylbenzene	91	12.114	12.114	0.000	99	218522	1.00	0.9471	
128 1,2-Dichlorobenzene	146	12.264	12.264	0.000	93	80319	1.00	0.9397	
129 1,2-Dibromo-3-Chloropropan	157	13.043	13.044	-0.001	71	2461	1.00	1.02	
130 1,2,4-Trichlorobenzene	180	14.016	14.009	0.007	91	51423	1.00	0.8692	
131 Hexachlorobutadiene	225	14.152	14.152	0.000	96	42742	1.00	0.9442	
132 Naphthalene	128	14.395	14.395	0.000	97	68513	1.00	0.8693	
133 1,2,3-Trichlorobenzene	180	14.724	14.724	0.000	92	40645	1.00	0.8683	
S 140 1,2-Dichloroethene, Total	96				0		2.00	1.89	
S 138 1,2-Dichloroethene, Total	1				0		2.00	1.89	
S 139 Xylenes, Total	106				0		2.00	1.84	
S 137 1,3-Dichloropropene, Total	1				0		2.00	1.71	
S 134 Trihalomethanes, Total	1				0		4.00	3.59	
S 135 Xylenes, Total (URS)	1				0		2.00	1.84	
S 136 Total BTEX	1				0			4.72	

Reagents:

MV-2cleve+AVA_00010	Amount Added: 0.50	Units: uL
MV-Gas/Ket A_00033	Amount Added: 0.50	Units: uL
MV-Main A_00022	Amount Added: 0.50	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

TestAmerica Denver

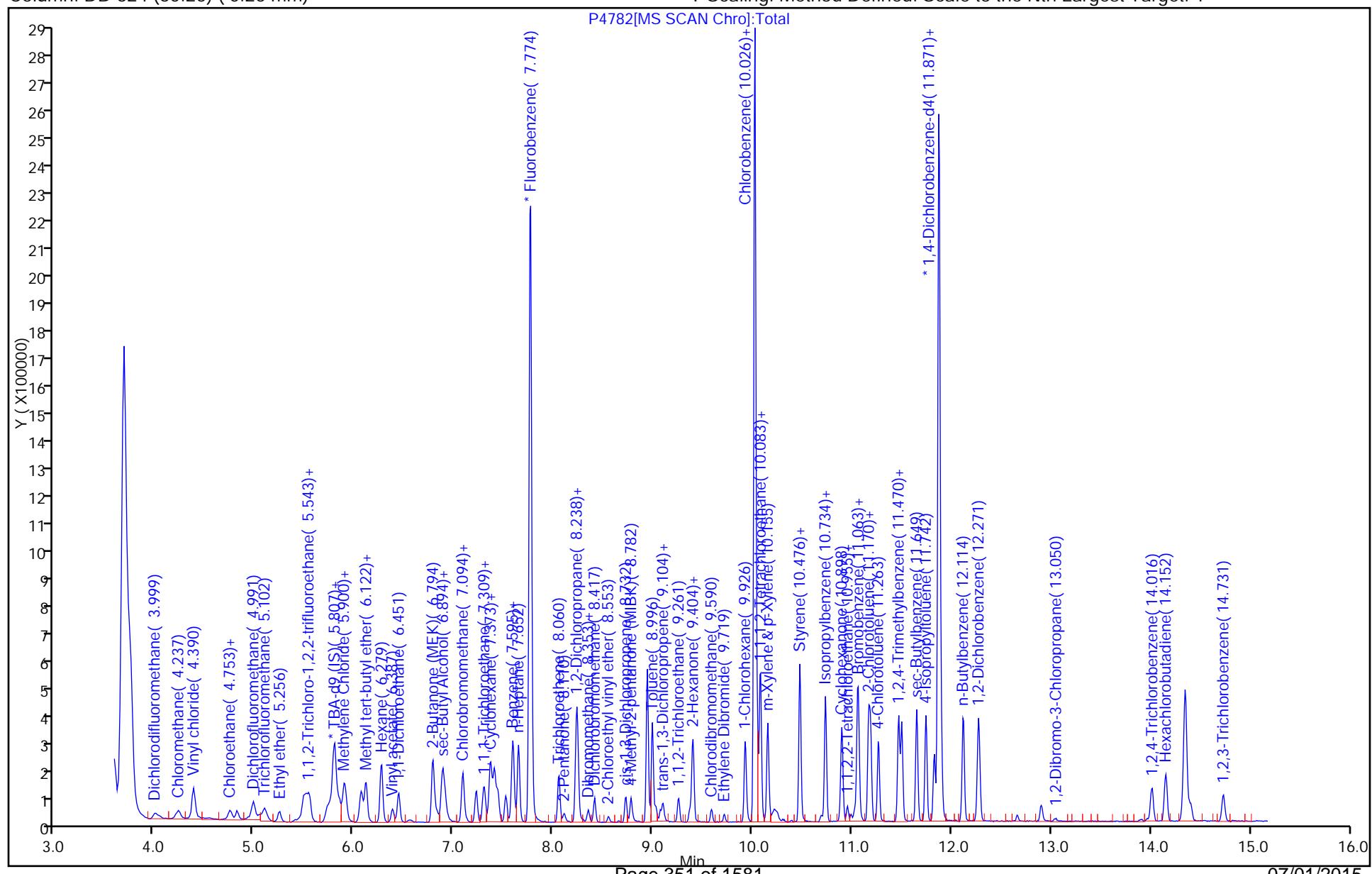
Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4782.D
 Injection Date: 02-Jun-2015 12:35:30
 Lims ID: STD010
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_V MSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: SEIFERTJ
Worklist Smp#: 13Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 12

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4783.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 02-Jun-2015 12:55:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD020
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:40 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj

Date: 02-Jun-2015 13:39:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.793	5.800	-0.007	90	244708	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.773	-0.006	98	1910774	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.033	-0.007	89	432854	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.878	-0.007	97	660719	12.5	12.5	
23 Dichlorodifluoromethane	85	3.997	4.013	-0.016	99	95218	2.00	1.43	
26 Chloromethane	50	4.235	4.250	-0.015	99	93287	2.00	1.76	
27 Vinyl chloride	62	4.388	4.390	-0.002	89	89944	2.00	1.80	
29 Bromomethane	94	4.751	4.767	-0.016	92	58612	2.00	1.85	
30 Chloroethane	64	4.821	4.837	-0.016	97	58497	2.00	1.85	
31 Dichlorofluoromethane	67	4.989	5.004	-0.015	98	175330	2.00	1.72	
32 Trichlorofluoromethane	101	5.101	5.102	-0.001	100	170551	2.00	1.81	
35 Ethyl ether	59	5.240	5.243	-0.003	93	52383	2.00	1.82	
39 Acrolein	56	5.408	5.411	-0.003	99	30633	20.0	17.0	
40 1,1,2-Trichloro-1,2,2-trif	151	5.492	5.495	-0.003	95	89197	2.00	1.80	
41 Acetone	43	5.522	5.528	-0.006	38	49928	8.00	6.86	
43 1,1-Dichloroethene	96	5.550	5.550	0.000	94	101135	2.00	1.78	
44 Iodomethane	142	5.729	5.729	0.000	99	146173	2.00	1.75	
45 Methyl acetate	43	5.750	5.751	-0.001	97	131429	10.0	8.95	
47 3-Chloro-1-propene	41	5.800	5.801	-0.001	90	196194	2.00	1.69	
48 Carbon disulfide	76	5.829	5.844	-0.015	99	380538	2.00	1.71	
49 2-Methyl-2-propanol	59	5.872	5.851	0.021	33	28834	20.0	19.1	M
50 Methylene Chloride	84	5.908	5.908	0.000	97	117129	2.00	1.81	
52 Acrylonitrile	53	6.065	6.065	0.000	95	112910	20.0	17.7	
51 Methyl tert-butyl ether	73	6.072	6.072	0.000	95	129936	2.00	1.70	
53 trans-1,2-Dichloroethene	96	6.115	6.123	-0.007	95	104314	2.00	1.80	
54 Hexane	57	6.272	6.273	-0.001	95	187863	2.00	1.82	
55 Vinyl acetate	43	6.387	6.380	0.007	97	158891	4.00	3.27	
57 1,1-Dichloroethane	63	6.444	6.444	0.000	97	197037	2.00	1.82	
61 2-Butanone (MEK)	43	6.837	6.844	-0.007	99	82957	8.00	7.82	
62 sec-Butyl Alcohol	45	6.880	6.880	0.000	89	44860	60.0	51.1	
63 cis-1,2-Dichloroethene	96	6.880	6.888	-0.008	85	97764	2.00	1.78	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.902	6.909	-0.007	83	131969	2.00	1.74	
67 Chlorobromomethane	128	7.087	7.088	-0.001	90	34170	2.00	1.81	
68 Chloroform	83	7.095	7.095	0.000	95	164543	2.00	1.79	
69 Tetrahydrofuran	42	7.116	7.116	0.000	89	19495	4.00	3.46	
70 Isobutyl alcohol	41	7.302	7.295	0.007	58	24190	50.0	45.5	
71 1,1,1-Trichloroethane	97	7.302	7.302	0.000	98	151171	2.00	1.77	
72 Cyclohexane	56	7.373	7.374	-0.001	95	212079	2.00	1.76	
73 1,1-Dichloropropene	75	7.409	7.410	-0.001	95	146778	2.00	1.79	
74 Carbon tetrachloride	117	7.438	7.445	-0.007	95	131833	2.00	1.73	
76 1,2-Dichloroethane	62	7.581	7.581	0.000	98	95551	2.00	1.81	
77 Benzene	78	7.595	7.595	0.000	97	411344	2.00	1.85	
14 n-Heptane	43	7.652	7.653	-0.001	95	212515	2.00	1.76	
79 Trichloroethene	95	8.053	8.053	0.000	96	102637	2.00	1.76	
80 2-Pentanone	43	8.103	8.103	0.000	98	81558	8.00	6.67	
82 Methylcyclohexane	55	8.231	8.232	-0.001	95	173969	2.00	1.80	
83 1,2-Dichloropropane	63	8.246	8.246	0.000	90	94800	2.00	1.79	
84 1,4-Dioxane	88	8.289	8.296	-0.007	87	4422	40.0	35.2	
85 Dibromomethane	93	8.353	8.346	0.007	94	31034	2.00	1.75	
86 Dichlorobromomethane	83	8.410	8.418	-0.008	98	95636	2.00	1.70	
87 2-Chloroethyl vinyl ether	63	8.553	8.546	0.007	92	17360	2.00	1.48	
89 cis-1,3-Dichloropropene	75	8.725	8.725	0.000	92	94600	2.00	1.62	
90 4-Methyl-2-pentanone (MIBK)	43	8.782	8.782	0.000	98	126189	8.00	6.69	
91 Toluene	91	8.997	8.997	-0.001	98	416933	2.00	1.82	
92 Ethyl methacrylate	69	9.075	9.076	-0.001	92	41173	2.00	1.58	
93 trans-1,3-Dichloropropene	75	9.104	9.097	0.007	97	65740	2.00	1.58	
94 1,1,2-Trichloroethane	97	9.254	9.261	-0.007	93	43166	2.00	1.76	
95 2-Hexanone	43	9.368	9.375	-0.007	96	76567	8.00	6.37	
96 1,3-Dichloropropane	76	9.397	9.397	0.000	98	86182	2.00	1.83	
97 Tetrachloroethene	164	9.404	9.404	0.000	94	81684	2.00	1.78	
98 Chlorodibromomethane	129	9.590	9.590	0.000	91	45381	2.00	1.62	
100 Ethylene Dibromide	107	9.719	9.719	0.000	98	37552	2.00	1.78	
101 1-Chlorohexane	91	9.926	9.926	0.000	83	126999	2.00	1.71	
102 Chlorobenzene	112	10.048	10.048	0.000	98	249834	2.00	1.87	
103 Ethylbenzene	106	10.076	10.077	-0.001	97	145220	2.00	1.80	
104 1,1,2-Tetrachloroethane	131	10.083	10.084	-0.001	94	68486	2.00	1.72	
105 m-Xylene & p-Xylene	106	10.155	10.155	0.000	99	175608	2.00	1.80	
107 o-Xylene	106	10.477	10.477	0.000	97	161771	2.00	1.81	
106 Styrene	104	10.477	10.477	0.000	90	227252	2.00	1.75	
108 Bromoform	173	10.691	10.691	0.000	93	19738	2.00	1.57	
109 Isopropylbenzene	105	10.734	10.734	0.000	97	461747	2.00	1.86	
111 Cyclohexanone	55	10.884	10.891	-0.007	96	35719	80.0	64.6	
112 1,1,2,2-Tetrachloroethane	83	10.956	10.956	0.000	96	41740	2.00	1.70	
113 trans-1,4-Dichloro-2-butene	53	10.984	10.992	-0.008	78	10804	2.00	1.64	
114 1,2,3-Trichloropropane	110	11.027	11.027	0.000	88	12394	2.00	1.85	
115 N-Propylbenzene	120	11.056	11.056	0.000	99	126803	2.00	1.79	
116 Bromobenzene	156	11.070	11.070	0.000	97	84926	2.00	1.81	
117 1,3,5-Trimethylbenzene	105	11.163	11.163	0.000	94	365612	2.00	1.84	
118 2-Chlorotoluene	126	11.184	11.185	-0.001	96	106067	2.00	1.85	
119 4-Chlorotoluene	126	11.263	11.263	0.000	99	102996	2.00	1.83	
120 tert-Butylbenzene	119	11.470	11.471	-0.001	93	373816	2.00	1.83	
121 1,2,4-Trimethylbenzene	105	11.499	11.499	0.000	98	373071	2.00	1.85	
122 sec-Butylbenzene	134	11.649	11.650	-0.001	95	104472	2.00	1.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.742	11.743	0.000	97	427326	2.00	1.87	
124 1,3-Dichlorobenzene	146	11.828	11.828	0.000	97	184960	2.00	1.80	
126 1,4-Dichlorobenzene	146	11.892	11.893	-0.001	95	192851	2.00	1.89	
127 n-Butylbenzene	91	12.114	12.114	0.000	99	430776	2.00	1.87	
128 1,2-Dichlorobenzene	146	12.264	12.264	0.000	96	155214	2.00	1.81	
129 1,2-Dibromo-3-Chloropropan	157	13.043	13.044	-0.001	71	5639	2.00	1.86	
130 1,2,4-Trichlorobenzene	180	14.009	14.009	0.000	93	101110	2.00	1.71	
131 Hexachlorobutadiene	225	14.152	14.152	0.000	96	81837	2.00	1.81	
132 Naphthalene	128	14.395	14.395	0.000	97	132175	2.00	1.68	
133 1,2,3-Trichlorobenzene	180	14.724	14.724	0.000	94	80795	2.00	1.72	
S 140 1,2-Dichloroethene, Total	96				0		4.00	3.59	
S 138 1,2-Dichloroethene, Total	1				0		4.00	3.59	
S 139 Xylenes, Total	106				0		4.00	3.61	
S 137 1,3-Dichloropropene, Total	1				0		4.00	3.20	
S 134 Trihalomethanes, Total	1				0		8.00	6.68	
S 135 Xylenes, Total (URS)	1				0		4.00	3.61	
S 136 Total BTEX	1				0			9.09	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-2cleve+AVA_00010	Amount Added: 1.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 1.00	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 21:55:40

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4783.D

Injection Date: 02-Jun-2015 12:55:30

Instrument ID: VMS_P

Lims ID: STD020

Operator ID: SEIFERTJ

Client ID:

Worklist Smp#: 14

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

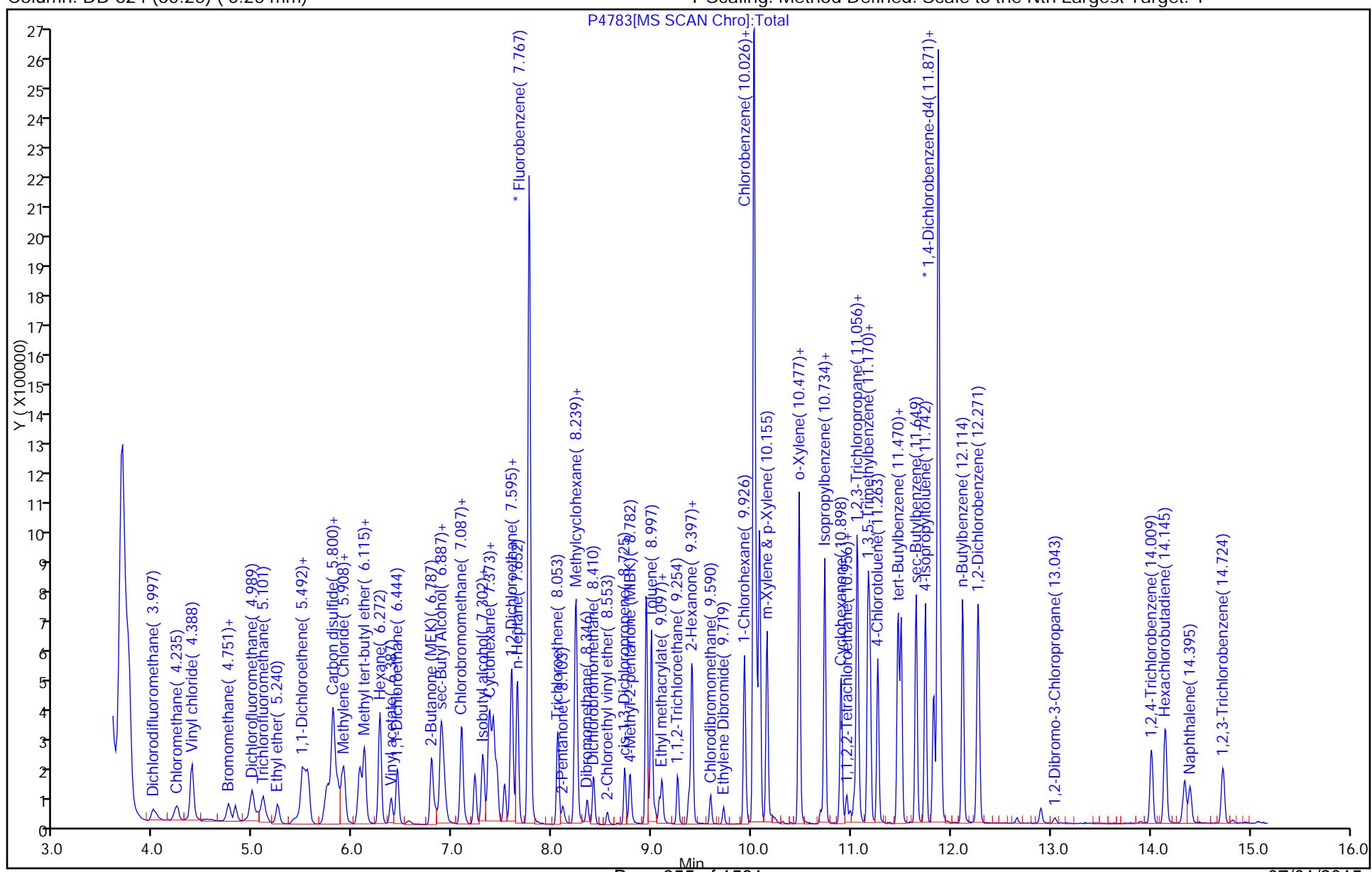
ALS Bottle#: 13

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



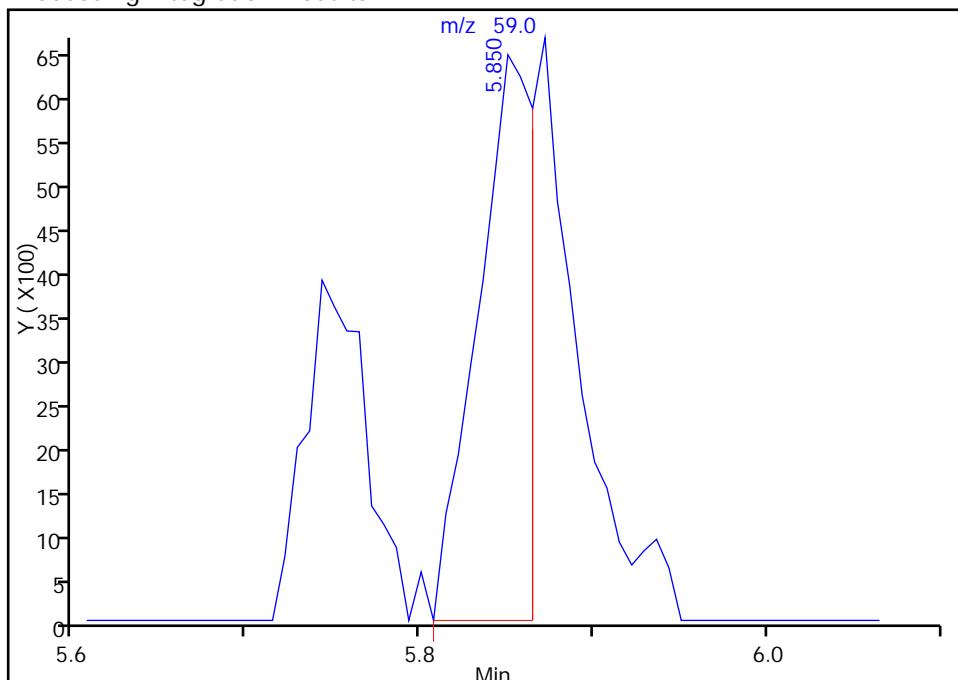
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4783.D
 Injection Date: 02-Jun-2015 12:55:30 Instrument ID: VMS_P
 Lims ID: STD020
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

49 2-Methyl-2-propanol, CAS: 75-65-0

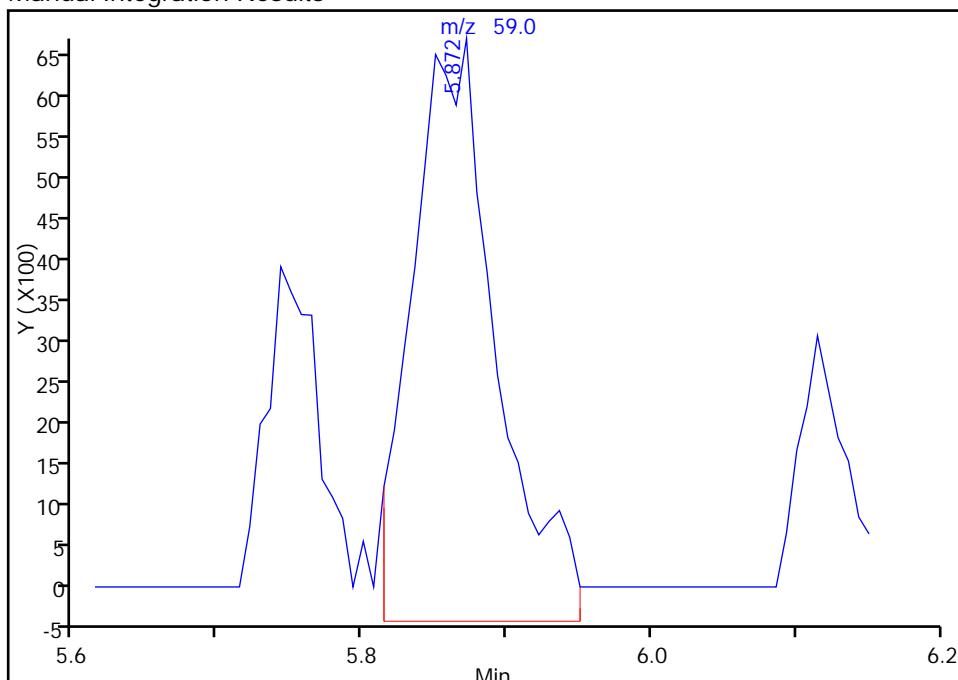
RT: 5.85
 Area: 14473
 Amount: 17.973150
 Amount Units: ug/l

Processing Integration Results



RT: 5.87
 Area: 28834
 Amount: 19.126589
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 02-Jun-2015 13:39:20

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4784.D
 Lims ID: STD050
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 02-Jun-2015 13:14:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD050
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:41 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj Date: 02-Jun-2015 13:41:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.793	5.800	-0.007	96	247413	250.0	250.0	
* 1 Fluorobenzene	96	7.773	7.773	0.000	98	1907458	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.033	-0.007	88	444216	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.878	-0.007	97	675501	12.5	12.5	
23 Dichlorodifluoromethane	85	4.013	4.013	0.000	100	391261	5.00	5.47	
26 Chloromethane	50	4.237	4.250	-0.013	99	301301	5.00	5.71	
27 Vinyl chloride	62	4.390	4.390	0.000	79	295419	5.00	5.92	
29 Bromomethane	94	4.767	4.767	0.000	92	187382	5.00	5.91	
30 Chloroethane	64	4.823	4.837	-0.014	98	176134	5.00	5.59	
31 Dichlorofluoromethane	67	4.991	5.004	-0.013	98	641280	5.00	6.29	
32 Trichlorofluoromethane	101	5.103	5.102	0.001	99	544702	5.00	5.78	
35 Ethyl ether	59	5.256	5.243	0.013	95	168338	5.00	5.87	
39 Acrolein	56	5.410	5.411	-0.001	99	99900	50.0	55.7	
40 1,1,2-Trichloro-1,2,2-trif	151	5.494	5.495	-0.001	96	282651	5.00	5.72	
41 Acetone	43	5.521	5.528	-0.007	100	136474	20.0	21.0	
43 1,1-Dichloroethene	96	5.557	5.550	0.007	95	327868	5.00	5.78	
44 Iodomethane	142	5.736	5.729	0.007	99	480165	5.00	5.75	
45 Methyl acetate	43	5.757	5.751	0.006	99	440427	25.0	30.0	
47 3-Chloro-1-propene	41	5.807	5.801	0.006	90	686176	5.00	5.93	
48 Carbon disulfide	76	5.850	5.844	0.006	99	1291128	5.00	5.83	M
49 2-Methyl-2-propanol	59	5.857	5.851	0.006	35	88201	50.0	60.2	
50 Methylene Chloride	84	5.914	5.908	0.006	98	304531	5.00	5.66	
52 Acrylonitrile	53	6.072	6.065	0.007	95	385509	50.0	59.4	
51 Methyl tert-butyl ether	73	6.072	6.072	0.000	96	441670	5.00	5.79	
53 trans-1,2-Dichloroethene	96	6.122	6.123	0.000	95	339922	5.00	5.88	
54 Hexane	57	6.279	6.273	0.006	96	620758	5.00	5.86	
55 Vinyl acetate	43	6.386	6.380	0.006	97	539165	10.0	10.7	
57 1,1-Dichloroethane	63	6.451	6.444	0.007	97	634000	5.00	5.86	
61 2-Butanone (MEK)	43	6.844	6.844	0.000	99	254870	20.0	24.2	
62 sec-Butyl Alcohol	45	6.880	6.880	0.000	50	177958	150.0	157.5	
63 cis-1,2-Dichloroethene	96	6.887	6.888	-0.001	87	324629	5.00	5.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.908	6.909	-0.001	87	424779	5.00	5.62	
67 Chlorobromomethane	128	7.087	7.088	-0.001	93	110739	5.00	5.87	
68 Chloroform	83	7.094	7.095	-0.001	95	534777	5.00	5.84	
69 Tetrahydrofuran	42	7.123	7.116	0.007	89	63043	10.0	11.2	
70 Isobutyl alcohol	41	7.294	7.295	-0.001	91	74546	125.0	138.8	
71 1,1,1-Trichloroethane	97	7.309	7.302	0.007	97	490728	5.00	5.75	
72 Cyclohexane	56	7.373	7.374	-0.001	96	713094	5.00	5.93	
73 1,1-Dichloropropene	75	7.409	7.410	-0.001	96	487869	5.00	5.97	
74 Carbon tetrachloride	117	7.445	7.445	0.000	98	444189	5.00	5.84	
76 1,2-Dichloroethane	62	7.588	7.581	0.007	97	306647	5.00	5.81	
77 Benzene	78	7.595	7.595	0.000	98	1308785	5.00	5.91	
14 n-Heptane	43	7.652	7.653	-0.001	96	725551	5.00	6.02	
79 Trichloroethene	95	8.052	8.053	-0.001	97	333002	5.00	5.73	
80 2-Pentanone	43	8.102	8.103	-0.001	98	311672	20.0	22.4	
82 Methylcyclohexane	55	8.231	8.232	-0.001	95	570820	5.00	5.92	
83 1,2-Dichloropropane	63	8.245	8.246	-0.001	90	308442	5.00	5.83	
84 1,4-Dioxane	88	8.295	8.296	-0.001	95	20792	100.0	123.0	
85 Dibromomethane	93	8.353	8.346	0.007	95	105334	5.00	5.96	
86 Dichlorobromomethane	83	8.417	8.418	-0.001	98	327782	5.00	5.82	
87 2-Chloroethyl vinyl ether	63	8.553	8.546	0.007	92	63804	5.00	4.65	
89 cis-1,3-Dichloropropene	75	8.724	8.725	-0.001	91	355599	5.00	5.60	
90 4-Methyl-2-pentanone (MIBK)	43	8.782	8.782	0.000	99	431891	20.0	22.0	
91 Toluene	91	8.996	8.997	-0.001	97	1376080	5.00	6.02	
92 Ethyl methacrylate	69	9.075	9.076	-0.001	93	158034	5.00	5.42	
93 trans-1,3-Dichloropropene	75	9.103	9.097	0.006	97	245862	5.00	5.46	
94 1,1,2-Trichloroethane	97	9.261	9.261	0.000	94	144502	5.00	5.90	
95 2-Hexanone	43	9.368	9.375	-0.007	97	279891	20.0	21.4	
96 1,3-Dichloropropane	76	9.397	9.397	0.000	98	289409	5.00	6.00	
97 Tetrachloroethene	164	9.404	9.404	0.000	94	274413	5.00	5.81	
98 Chlorodibromomethane	129	9.590	9.590	0.000	90	166535	5.00	5.47	
100 Ethylene Dibromide	107	9.718	9.719	-0.001	100	126008	5.00	5.82	
101 1-Chlorohexane	91	9.926	9.926	0.000	90	466503	5.00	5.98	
102 Chlorobenzene	112	10.047	10.048	-0.001	96	809589	5.00	5.89	
103 Ethylbenzene	106	10.076	10.077	-0.001	97	495132	5.00	5.99	
104 1,1,2-Tetrachloroethane	131	10.083	10.084	-0.001	94	235381	5.00	5.76	
105 m-Xylene & p-Xylene	106	10.154	10.155	-0.001	99	603254	5.00	6.03	
107 o-Xylene	106	10.476	10.477	-0.001	87	547680	5.00	5.98	
106 Styrene	104	10.476	10.477	-0.001	85	816065	5.00	6.09	
108 Bromoform	173	10.691	10.691	0.000	95	73360	5.00	5.23	
109 Isopropylbenzene	105	10.734	10.734	0.000	97	1541154	5.00	6.08	
111 Cyclohexanone	55	10.884	10.891	-0.007	96	124670	200.0	204.7	
112 1,1,2,2-Tetrachloroethane	83	10.955	10.956	-0.001	95	149468	5.00	5.97	
113 trans-1,4-Dichloro-2-butene	53	10.984	10.992	-0.008	84	39000	5.00	5.45	
114 1,2,3-Trichloropropane	110	11.027	11.027	0.000	87	42313	5.00	6.14	
115 N-Propylbenzene	120	11.055	11.056	-0.001	99	440526	5.00	6.10	
116 Bromobenzene	156	11.070	11.070	0.000	96	288982	5.00	6.02	
117 1,3,5-Trimethylbenzene	105	11.163	11.163	0.000	94	1255912	5.00	6.18	
118 2-Chlorotoluene	126	11.184	11.185	-0.001	95	355645	5.00	6.06	
119 4-Chlorotoluene	126	11.263	11.263	0.000	99	345054	5.00	5.99	
120 tert-Butylbenzene	119	11.470	11.471	-0.001	93	1273391	5.00	6.10	
121 1,2,4-Trimethylbenzene	105	11.499	11.499	0.000	98	1263329	5.00	6.14	
122 sec-Butylbenzene	134	11.649	11.650	-0.001	95	359215	5.00	6.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.742	11.743	0.000	97	1438787	5.00	6.15	
124 1,3-Dichlorobenzene	146	11.828	11.828	0.000	97	617996	5.00	5.89	
126 1,4-Dichlorobenzene	146	11.892	11.893	-0.001	93	607194	5.00	5.81	
127 n-Butylbenzene	91	12.114	12.114	0.000	99	1448527	5.00	6.14	
128 1,2-Dichlorobenzene	146	12.264	12.264	0.000	95	508478	5.00	5.81	
129 1,2-Dibromo-3-Chloropropan	157	13.036	13.044	-0.008	74	18941	5.00	5.23	
130 1,2,4-Trichlorobenzene	180	14.008	14.009	-0.001	94	357868	5.00	5.91	
131 Hexachlorobutadiene	225	14.151	14.152	-0.001	97	264167	5.00	5.70	
132 Naphthalene	128	14.395	14.395	0.000	97	469422	5.00	5.82	
133 1,2,3-Trichlorobenzene	180	14.723	14.724	-0.001	94	277682	5.00	5.80	
S 140 1,2-Dichloroethene, Total	96				0		10.0	11.8	
S 138 1,2-Dichloroethene, Total	1				0		10.0	11.8	
S 139 Xylenes, Total	106				0		10.0	12.0	
S 137 1,3-Dichloropropene, Total	1				0		10.0	11.1	
S 134 Trihalomethanes, Total	1				0		20.0	22.4	
S 135 Xylenes, Total (URS)	1				0		10.0	12.0	
S 136 Total BTEX	1				0			29.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-2cleve+AVA_00010	Amount Added: 2.50	Units: uL
MV-Gas/Ket A_00033	Amount Added: 2.50	Units: uL
MV-Main A_00022	Amount Added: 2.50	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 21:55:42

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4784.D
 Injection Date: 02-Jun-2015 13:14:30
 Lims ID: STD050
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

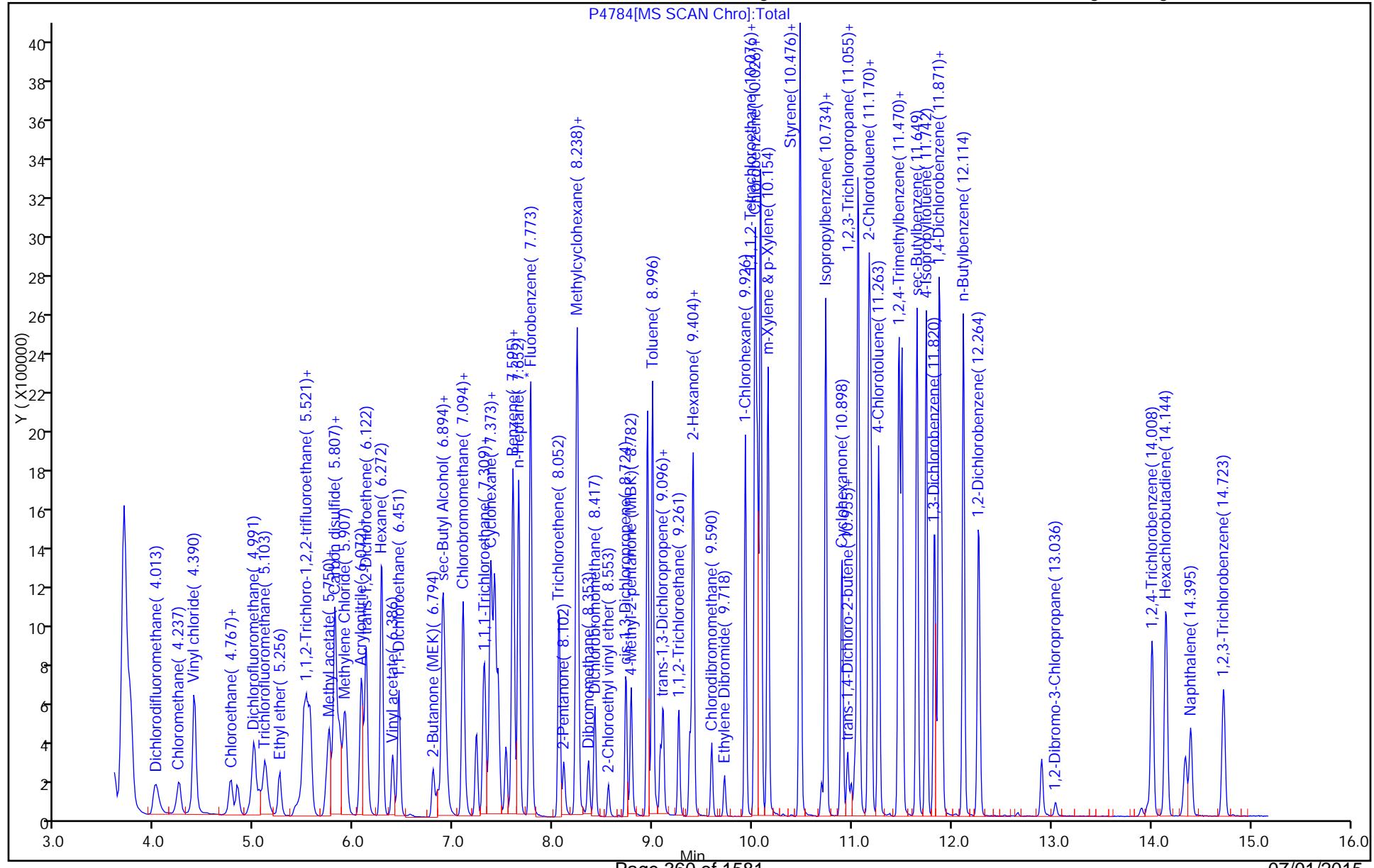
Instrument ID: VMS_P

Operator ID: SEIFERTJ
Worklist Smp#: 15Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 14

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

P4784[MS SCAN Chro]:Total



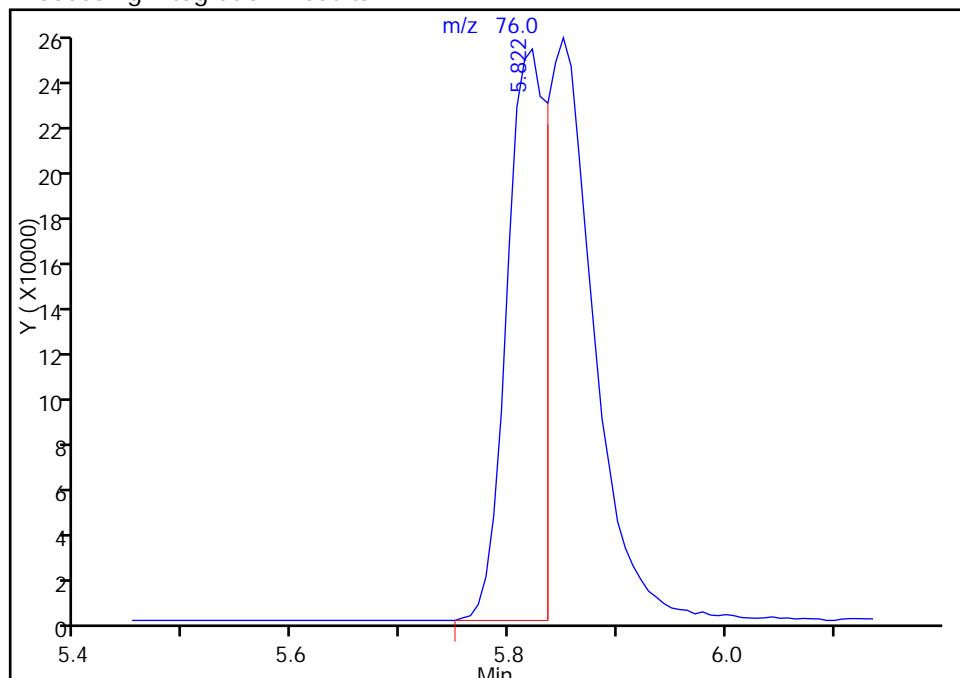
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4784.D
 Injection Date: 02-Jun-2015 13:14:30 Instrument ID: VMS_P
 Lims ID: STD050
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

48 Carbon disulfide, CAS: 75-15-0

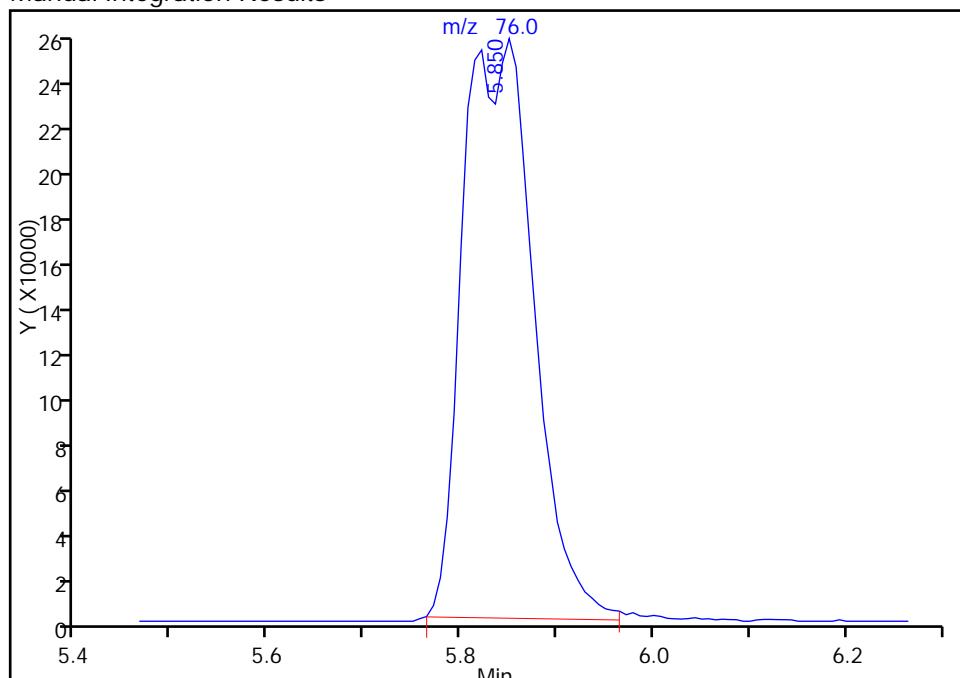
RT: 5.82
 Area: 643557
 Amount: 4.999724
 Amount Units: ug/l

Processing Integration Results



RT: 5.85
 Area: 1291128
 Amount: 5.826527
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 02-Jun-2015 13:41:20

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4785.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 02-Jun-2015 13:34:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:43 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj Date: 02-Jun-2015 14:45:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.801	5.801	0.000	91	232390	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.767	0.000	98	1714577	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.026	0.000	88	397058	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.871	0.000	96	615751	12.5	12.5	
23 Dichlorodifluoromethane	85	4.000	4.000	0.000	100	667147	10.0	10.4	
26 Chloromethane	50	4.238	4.238	0.000	100	533225	10.0	11.2	
27 Vinyl chloride	62	4.391	4.391	0.000	82	521151	10.0	11.6	
29 Bromomethane	94	4.755	4.755	0.000	92	329400	10.0	11.6	
30 Chloroethane	64	4.824	4.824	0.000	98	306979	10.0	10.8	
31 Dichlorofluoromethane	67	4.992	4.992	0.000	98	959587	10.0	10.5	
32 Trichlorofluoromethane	101	5.104	5.104	0.000	100	975572	10.0	11.5	
35 Ethyl ether	59	5.243	5.243	0.000	96	287940	10.0	11.2	
39 Acrolein	56	5.411	5.411	0.000	99	186748	100.0	115.8	
40 1,1,2-Trichloro-1,2,2-trif	151	5.495	5.495	0.000	95	490067	10.0	11.0	
41 Acetone	43	5.522	5.522	0.000	98	256421	40.0	45.3	
43 1,1-Dichloroethene	96	5.550	5.550	0.000	94	570508	10.0	11.2	
44 Iodomethane	142	5.729	5.729	0.000	100	849270	10.0	11.3	
45 Methyl acetate	43	5.751	5.751	0.000	99	783349	50.0	59.4	
47 3-Chloro-1-propene	41	5.801	5.801	0.000	91	1196797	10.0	11.5	
48 Carbon disulfide	76	5.844	5.844	0.000	100	2274362	10.0	11.4	
49 2-Methyl-2-propanol	59	5.851	5.851	0.000	35	143506	100.0	105.1	
50 Methylene Chloride	84	5.908	5.908	0.000	98	512366	10.0	11.1	
52 Acrylonitrile	53	6.065	6.065	0.000	98	673992	100.0	115.0	
51 Methyl tert-butyl ether	73	6.072	6.072	0.000	97	795805	10.0	11.6	
53 trans-1,2-Dichloroethene	96	6.123	6.123	0.000	95	570283	10.0	11.0	
54 Hexane	57	6.273	6.273	0.000	96	1064073	10.0	11.2	
55 Vinyl acetate	43	6.380	6.380	0.000	97	1070266	20.0	23.3	
57 1,1-Dichloroethane	63	6.444	6.444	0.000	96	1083019	10.0	11.1	
61 2-Butanone (MEK)	43	6.838	6.838	0.000	99	429457	40.0	45.3	
62 sec-Butyl Alcohol	45	6.880	6.880	0.000	96	354048	300.0	317.3	
63 cis-1,2-Dichloroethene	96	6.888	6.888	0.000	86	556869	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.909	6.909	0.000	88	750372	10.0	11.0	
67 Chlorobromomethane	128	7.088	7.088	0.000	94	191317	10.0	11.3	
68 Chloroform	83	7.095	7.095	0.000	95	930171	10.0	11.3	
69 Tetrahydrofuran	42	7.116	7.116	0.000	91	115097	20.0	22.8	
70 Isobutyl alcohol	41	7.295	7.295	0.000	91	146260	250.0	290.0	
71 1,1,1-Trichloroethane	97	7.302	7.302	0.000	98	869854	10.0	11.3	
72 Cyclohexane	56	7.374	7.374	0.000	95	1233109	10.0	11.4	
73 1,1-Dichloropropene	75	7.410	7.410	0.000	96	841174	10.0	11.5	
74 Carbon tetrachloride	117	7.445	7.445	0.000	96	783595	10.0	11.5	
76 1,2-Dichloroethane	62	7.581	7.581	0.000	97	545089	10.0	11.5	
77 Benzene	78	7.595	7.595	0.000	98	2272739	10.0	11.4	
14 n-Heptane	43	7.653	7.653	0.000	96	1244807	10.0	11.5	
79 Trichloroethene	95	8.053	8.053	0.000	97	580229	10.0	11.1	
80 2-Pentanone	43	8.103	8.103	0.000	98	549680	40.0	42.9	
82 Methylcyclohexane	55	8.232	8.232	0.000	96	984962	10.0	11.4	
83 1,2-Dichloropropane	63	8.246	8.246	0.000	92	533381	10.0	11.2	
84 1,4-Dioxane	88	8.296	8.296	0.000	93	31149	200.0	197.3	
85 Dibromomethane	93	8.346	8.346	0.000	94	181158	10.0	11.4	
86 Dichlorobromomethane	83	8.418	8.418	0.000	98	585066	10.0	11.6	
87 2-Chloroethyl vinyl ether	63	8.546	8.546	0.000	93	130856	10.0	10.2	
89 cis-1,3-Dichloropropene	75	8.725	8.725	0.000	91	637678	10.0	11.1	
90 4-Methyl-2-pentanone (MIBK)	43	8.782	8.782	0.000	99	802526	40.0	45.0	
91 Toluene	91	8.997	8.997	0.000	97	2343272	10.0	11.4	
92 Ethyl methacrylate	69	9.076	9.076	0.000	95	283131	10.0	10.7	
93 trans-1,3-Dichloropropene	75	9.097	9.097	0.000	99	451655	10.0	11.0	
94 1,1,2-Trichloroethane	97	9.261	9.261	0.000	93	249558	10.0	11.3	
95 2-Hexanone	43	9.369	9.369	0.000	99	505643	40.0	42.7	
96 1,3-Dichloropropane	76	9.397	9.397	0.000	98	493791	10.0	11.5	
97 Tetrachloroethene	164	9.404	9.404	0.000	94	466238	10.0	11.0	
98 Chlorodibromomethane	129	9.590	9.590	0.000	91	300488	10.0	10.9	
100 Ethylene Dibromide	107	9.719	9.719	0.000	99	226416	10.0	11.7	
101 1-Chlorohexane	91	9.926	9.926	0.000	89	803114	10.0	11.5	
102 Chlorobenzene	112	10.048	10.048	0.000	94	1390431	10.0	11.3	
103 Ethylbenzene	106	10.077	10.077	0.000	97	841547	10.0	11.4	
104 1,1,2-Tetrachloroethane	131	10.084	10.084	0.000	95	421712	10.0	11.5	
105 m-Xylene & p-Xylene	106	10.155	10.155	0.000	99	1026243	10.0	11.5	
107 o-Xylene	106	10.477	10.477	0.000	87	959589	10.0	11.7	
106 Styrene	104	10.477	10.477	0.000	85	1434156	10.0	12.0	
108 Bromoform	173	10.691	10.691	0.000	96	134904	10.0	10.6	
109 Isopropylbenzene	105	10.734	10.734	0.000	97	2670191	10.0	11.6	
111 Cyclohexanone	55	10.884	10.884	0.000	96	232106	400.0	419.5	
112 1,1,2,2-Tetrachloroethane	83	10.956	10.956	0.000	95	261553	10.0	11.5	
113 trans-1,4-Dichloro-2-butene	53	10.992	10.992	0.000	87	71155	10.0	10.8	
114 1,2,3-Trichloropropane	110	11.027	11.027	0.000	88	70097	10.0	11.2	
115 N-Propylbenzene	120	11.056	11.056	0.000	98	761396	10.0	11.6	
116 Bromobenzene	156	11.070	11.070	0.000	98	499271	10.0	11.4	
117 1,3,5-Trimethylbenzene	105	11.163	11.163	0.000	96	2179766	10.0	11.8	
118 2-Chlorotoluene	126	11.185	11.185	0.000	95	606265	10.0	11.3	
119 4-Chlorotoluene	126	11.263	11.263	0.000	99	605207	10.0	11.5	
120 tert-Butylbenzene	119	11.471	11.471	0.000	93	2209801	10.0	11.6	
121 1,2,4-Trimethylbenzene	105	11.499	11.499	0.000	98	2214940	10.0	11.8	
122 sec-Butylbenzene	134	11.650	11.650	0.000	95	638715	10.0	11.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.743	11.743	0.000	97	2512036	10.0	11.8	
124 1,3-Dichlorobenzene	146	11.828	11.828	0.000	97	1068257	10.0	11.2	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	92	1046247	10.0	11.0	
127 n-Butylbenzene	91	12.114	12.114	0.000	98	2520526	10.0	11.7	
128 1,2-Dichlorobenzene	146	12.264	12.264	0.000	95	891402	10.0	11.2	
129 1,2-Dibromo-3-Chloropropan	157	13.044	13.044	0.000	74	36102	10.0	10.5	
130 1,2,4-Trichlorobenzene	180	14.009	14.009	0.000	93	640959	10.0	11.6	
131 Hexachlorobutadiene	225	14.152	14.152	0.000	97	464020	10.0	11.0	
132 Naphthalene	128	14.395	14.395	0.000	97	866586	10.0	11.8	
133 1,2,3-Trichlorobenzene	180	14.724	14.724	0.000	94	508012	10.0	11.6	
S 140 1,2-Dichloroethene, Total	96				0		20.0	22.3	
S 138 1,2-Dichloroethene, Total	1				0		20.0	22.3	
S 139 Xylenes, Total	106				0		20.0	23.2	
S 137 1,3-Dichloropropene, Total	1				0		20.0	22.1	
S 134 Trihalomethanes, Total	1				0		40.0	44.4	
S 135 Xylenes, Total (URS)	1				0		20.0	23.2	

Reagents:

MV-2cleve+AVA_00010	Amount Added: 5.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL
MV-Main A_00022	Amount Added: 5.00	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 21:55:43

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4785.D
 Injection Date: 02-Jun-2015 13:34:30
 Lims ID: STD10
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

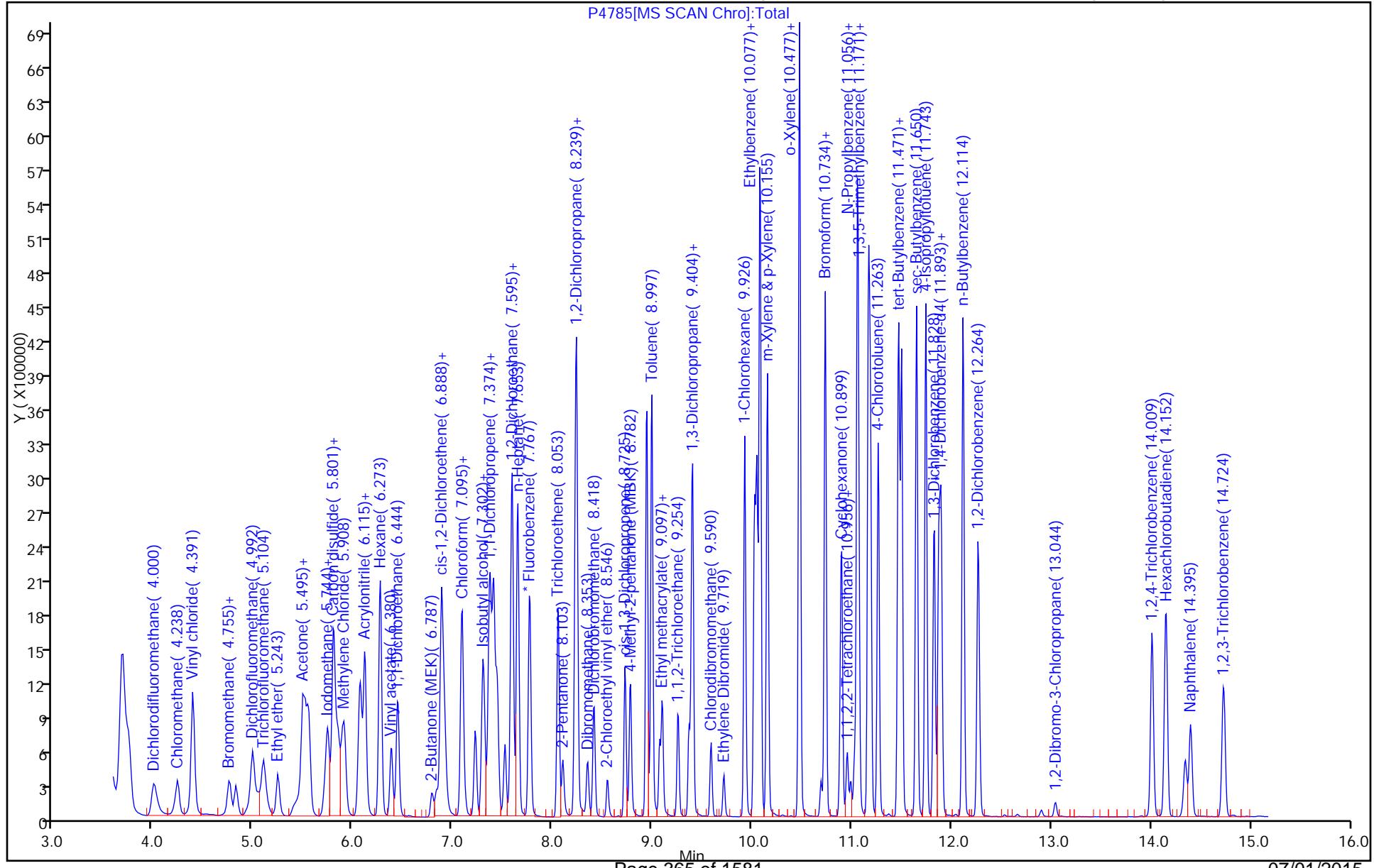
Instrument ID: VMS_P

Operator ID: SEIFERTJ
Worklist Smp#: 16Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 15

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

P4785[MS SCAN Chro]:Total



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4786.D
 Lims ID: STD30
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 02-Jun-2015 13:54:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD30
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:45 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj

Date: 02-Jun-2015 14:47:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.793	5.801	-0.008	33	277714	250.0	250.0	
* 1 Fluorobenzene	96	7.774	7.767	0.007	98	1981887	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.026	0.000	88	460598	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.871	0.000	97	720834	12.5	12.5	
23 Dichlorodifluoromethane	85	4.012	4.000	0.012	100	2032653	30.0	29.6	
26 Chloromethane	50	4.249	4.238	0.011	99	1528652	30.0	27.9	
27 Vinyl chloride	62	4.403	4.391	0.012	99	1520432	30.0	29.3	
29 Bromomethane	94	4.766	4.755	0.012	92	936137	30.0	28.4	
30 Chloroethane	64	4.836	4.824	0.012	98	860851	30.0	26.3	
31 Dichlorofluoromethane	67	5.003	4.992	0.011	98	2791449	30.0	26.4	
32 Trichlorofluoromethane	101	5.101	5.104	-0.003	100	2875046	30.0	29.4	
35 Ethyl ether	59	5.255	5.243	0.011	96	860722	30.0	28.9	
39 Acrolein	56	5.408	5.411	-0.003	99	552368	300.0	296.3	
40 1,1,2-Trichloro-1,2,2-trif	151	5.492	5.495	-0.003	96	1459375	30.0	28.4	
41 Acetone	43	5.522	5.522	0.000	98	754589	120.0	117.2	
43 1,1-Dichloroethene	96	5.558	5.550	0.008	95	1711428	30.0	29.1	
44 Iodomethane	142	5.736	5.729	0.007	100	2554904	30.0	29.4	
45 Methyl acetate	43	5.751	5.751	0.000	99	2206304	150.0	144.8	
47 3-Chloro-1-propene	41	5.808	5.801	0.007	90	3590235	30.0	29.9	
48 Carbon disulfide	76	5.851	5.844	0.007	100	6829796	30.0	29.7	
49 2-Methyl-2-propanol	59	5.858	5.851	0.007	93	449481	300.0	277.4	
50 Methylene Chloride	84	5.915	5.908	0.007	98	1467807	30.0	28.4	
52 Acrylonitrile	53	6.072	6.065	0.007	95	2011847	300.0	296.0	
51 Methyl tert-butyl ether	73	6.072	6.072	0.000	97	2428836	30.0	30.7	
53 trans-1,2-Dichloroethene	96	6.122	6.123	0.000	95	1724662	30.0	28.7	
54 Hexane	57	6.273	6.273	0.000	96	3163783	30.0	28.8	
55 Vinyl acetate	43	6.387	6.380	0.007	97	3093908	60.0	58.1	
57 1,1-Dichloroethane	63	6.451	6.444	0.007	97	3215705	30.0	28.6	
61 2-Butanone (MEK)	43	6.837	6.838	-0.001	99	1283973	120.0	117.3	
62 sec-Butyl Alcohol	45	6.880	6.880	0.000	95	1177843	900.0	857.0	
63 cis-1,2-Dichloroethene	96	6.887	6.888	-0.001	89	1673834	30.0	29.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.909	6.909	0.000	89	2361256	30.0	30.0	
67 Chlorobromomethane	128	7.088	7.088	0.000	94	567624	30.0	28.9	
68 Chloroform	83	7.095	7.095	0.000	97	2775914	30.0	29.2	
69 Tetrahydrofuran	42	7.116	7.116	0.000	92	344261	60.0	59.0	
70 Isobutyl alcohol	41	7.295	7.295	0.000	91	405503	750.0	672.7	
71 1,1,1-Trichloroethane	97	7.309	7.302	0.007	98	2672460	30.0	30.1	
72 Cyclohexane	56	7.374	7.374	0.000	96	3728779	30.0	29.8	
73 1,1-Dichloropropene	75	7.409	7.410	-0.001	95	2482846	30.0	29.3	
74 Carbon tetrachloride	117	7.445	7.445	0.000	97	2433470	30.0	30.8	
76 1,2-Dichloroethane	62	7.581	7.581	0.000	98	1608335	30.0	29.3	
77 Benzene	78	7.595	7.595	0.000	99	6562105	30.0	28.5	
14 n-Heptane	43	7.653	7.653	-0.001	96	3730666	30.0	29.8	
79 Trichloroethene	95	8.053	8.053	0.000	97	1767915	30.0	29.3	
80 2-Pentanone	43	8.103	8.103	0.000	98	1785514	120.0	118.5	
82 Methylcyclohexane	55	8.232	8.232	0.000	95	2975726	30.0	29.7	
83 1,2-Dichloropropane	63	8.246	8.246	0.000	92	1553163	30.0	28.2	
84 1,4-Dioxane	88	8.296	8.296	0.000	98	108574	600.0	571.6	
85 Dibromomethane	93	8.353	8.346	0.007	94	550424	30.0	30.0	
86 Dichlorobromomethane	83	8.418	8.418	0.000	99	1821783	30.0	31.1	
87 2-Chloroethyl vinyl ether	63	8.546	8.546	0.000	93	434669	30.0	28.8	
89 cis-1,3-Dichloropropene	75	8.725	8.725	0.000	92	2025485	30.0	30.2	
90 4-Methyl-2-pentanone (MIBK)	43	8.782	8.782	0.000	99	2459291	120.0	118.8	
91 Toluene	91	8.997	8.997	0.000	98	6838716	30.0	28.8	
92 Ethyl methacrylate	69	9.075	9.076	-0.001	95	928658	30.0	29.9	
93 trans-1,3-Dichloropropene	75	9.097	9.097	0.000	99	1441543	30.0	30.0	
94 1,1,2-Trichloroethane	97	9.261	9.261	0.000	94	755862	30.0	29.7	
95 2-Hexanone	43	9.369	9.369	0.000	98	1660845	120.0	120.1	
96 1,3-Dichloropropane	76	9.397	9.397	0.000	96	1480481	30.0	29.6	
97 Tetrachloroethene	164	9.404	9.404	0.000	96	1422458	30.0	29.1	
98 Chlorodibromomethane	129	9.590	9.590	0.000	90	953194	30.0	29.6	
100 Ethylene Dibromide	107	9.719	9.719	0.000	98	698844	30.0	31.1	
101 1-Chlorohexane	91	9.926	9.926	0.000	90	2471142	30.0	30.3	
102 Chlorobenzene	112	10.048	10.048	0.000	94	4082618	30.0	28.6	
103 Ethylbenzene	106	10.076	10.077	-0.001	98	2563883	30.0	29.9	
104 1,1,2-Tetrachloroethane	131	10.084	10.084	0.000	95	1317909	30.0	31.1	
105 m-Xylene & p-Xylene	106	10.155	10.155	0.000	98	3068481	30.0	29.6	
107 o-Xylene	106	10.477	10.477	0.000	86	2860455	30.0	30.1	
106 Styrene	104	10.477	10.477	0.000	84	4344694	30.0	31.2	
108 Bromoform	173	10.691	10.691	0.000	96	442747	30.0	29.6	
109 Isopropylbenzene	105	10.734	10.734	0.000	97	7863636	30.0	29.1	
111 Cyclohexanone	55	10.884	10.884	0.000	96	749142	1200.0	1156.0	
112 1,1,2,2-Tetrachloroethane	83	10.956	10.956	0.000	95	787475	30.0	29.5	
113 trans-1,4-Dichloro-2-butene	53	10.992	10.992	0.000	87	232220	30.0	29.7	
114 1,2,3-Trichloropropane	110	11.027	11.027	0.000	86	216572	30.0	29.4	
115 N-Propylbenzene	120	11.056	11.056	0.000	98	2302304	30.0	29.9	
116 Bromobenzene	156	11.070	11.070	0.000	98	1501575	30.0	29.3	
117 1,3,5-Trimethylbenzene	105	11.170	11.163	0.007	96	6507212	30.0	30.0	
118 2-Chlorotoluene	126	11.185	11.185	0.000	95	1817800	30.0	29.0	
119 4-Chlorotoluene	126	11.263	11.263	0.000	99	1850307	30.0	30.1	
120 tert-Butylbenzene	119	11.471	11.471	0.000	93	6702128	30.0	30.1	
121 1,2,4-Trimethylbenzene	105	11.499	11.499	0.000	98	6540492	30.0	29.8	
122 sec-Butylbenzene	134	11.649	11.650	-0.001	96	1921156	30.0	30.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.742	11.743	0.000	96	7453710	30.0	29.8	
124 1,3-Dichlorobenzene	146	11.828	11.828	0.000	98	3217605	30.0	28.8	
126 1,4-Dichlorobenzene	146	11.900	11.893	0.007	93	3131372	30.0	28.1	
127 n-Butylbenzene	91	12.114	12.114	0.000	98	7465140	30.0	29.6	
128 1,2-Dichlorobenzene	146	12.264	12.264	0.000	95	2678357	30.0	28.7	
129 1,2-Dibromo-3-Chloropropan	157	13.044	13.044	0.000	77	114161	30.0	27.8	
130 1,2,4-Trichlorobenzene	180	14.009	14.009	0.000	94	1977910	30.0	30.6	
131 Hexachlorobutadiene	225	14.152	14.152	0.000	97	1445636	30.0	29.3	
132 Naphthalene	128	14.402	14.395	0.007	98	2631844	30.0	30.6	
133 1,2,3-Trichlorobenzene	180	14.731	14.724	0.007	94	1554331	30.0	30.4	
S 140 1,2-Dichloroethene, Total	96				0		60.0	58.2	
S 138 1,2-Dichloroethene, Total	1				0		60.0	58.2	
S 139 Xylenes, Total	106				0		60.0	59.7	
S 137 1,3-Dichloropropene, Total	1				0		60.0	60.2	
S 134 Trihalomethanes, Total	1				0		120.0	119.6	
S 135 Xylenes, Total (URS)	1				0		60.0	59.7	
S 136 Total BTEX	1				0			146.9	

Reagents:

MV-2cleve+AVA_00010	Amount Added: 15.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 15.00	Units: uL
MV-Main A_00022	Amount Added: 15.00	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 21:55:45

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

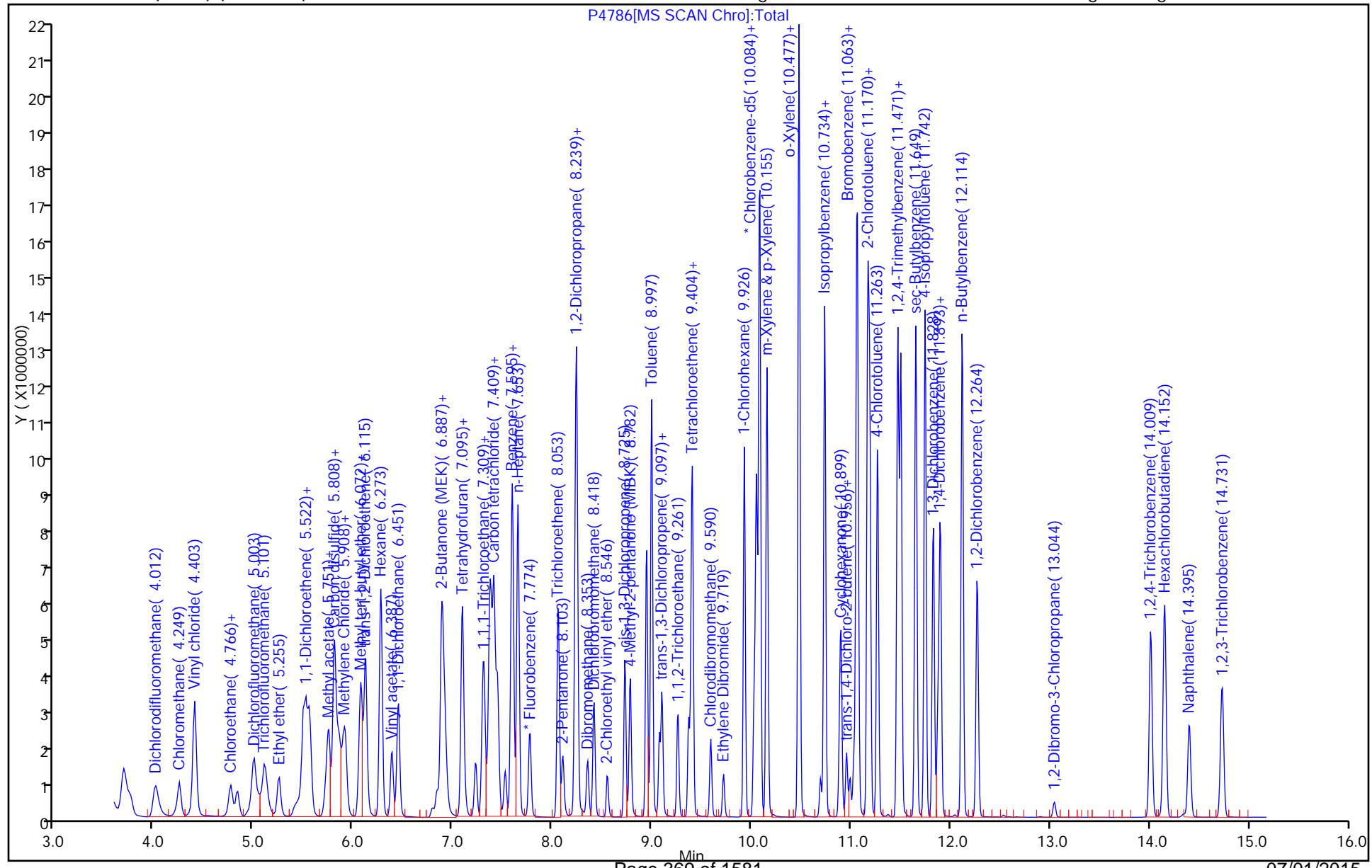
Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4786.D
 Injection Date: 02-Jun-2015 13:54:30
 Lims ID: STD30
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: SEIFERTJ
Worklist Smp#: 17Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 16

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Lims ID: STD60
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 02-Jun-2015 14:13:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: STD60
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:46 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: seifertj Date: 02-Jun-2015 14:48:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.801	-0.007	29	294843	250.0	250.0	
* 1 Fluorobenzene	96	7.768	7.767	0.001	98	2110076	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.027	10.026	0.001	87	494439	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.872	11.871	0.001	97	769158	12.5	12.5	
23 Dichlorodifluoromethane	85	3.999	4.000	-0.001	100	3792144	60.0	60.1	
26 Chloromethane	50	4.236	4.238	-0.002	99	3078991	60.0	52.7	
27 Vinyl chloride	62	4.390	4.391	-0.001	99	2959094	60.0	53.6	
29 Bromomethane	94	4.753	4.755	-0.001	91	1821909	60.0	52.0	
30 Chloroethane	64	4.823	4.824	-0.001	99	1726725	60.0	49.6	
31 Dichlorofluoromethane	67	4.991	4.992	-0.001	98	5161487	60.0	45.8	
32 Trichlorofluoromethane	101	5.102	5.104	-0.002	100	5576899	60.0	53.5	
35 Ethyl ether	59	5.242	5.243	-0.001	96	1765498	60.0	55.7	
39 Acrolein	56	5.410	5.411	-0.001	100	1234962	599.9	622.2	
40 1,1,2-Trichloro-1,2,2-trif	151	5.493	5.495	-0.002	95	3271169	60.0	59.9	
41 Acetone	43	5.523	5.522	0.001	99	1596918	240.0	234.2	
43 1,1-Dichloroethene	96	5.551	5.550	0.001	96	3744718	60.0	59.7	
44 Iodomethane	142	5.730	5.729	0.001	100	5459266	60.0	59.1	
45 Methyl acetate	43	5.744	5.751	-0.007	99	4522747	300.0	278.9	
47 3-Chloro-1-propene	41	5.794	5.801	-0.007	90	7475034	60.0	58.4	
48 Carbon disulfide	76	5.844	5.844	0.000	99	14416049	60.0	58.8	M
49 2-Methyl-2-propanol	59	5.852	5.851	0.001	94	1047287	600.0	610.1	
50 Methylene Chloride	84	5.909	5.908	0.001	98	3021861	60.0	55.5	
52 Acrylonitrile	53	6.066	6.065	0.001	97	4221720	600.0	582.9	
51 Methyl tert-butyl ether	73	6.066	6.072	-0.006	99	5181432	60.0	61.4	
53 trans-1,2-Dichloroethene	96	6.116	6.123	-0.006	95	3624908	60.0	56.7	
54 Hexane	57	6.266	6.273	-0.007	96	6592047	60.0	55.9	
55 Vinyl acetate	43	6.381	6.380	0.001	97	6745539	120.0	118.8	
57 1,1-Dichloroethane	63	6.445	6.444	0.001	97	6636400	60.0	55.5	
61 2-Butanone (MEK)	43	6.831	6.838	-0.007	99	2733622	240.0	234.5	
62 sec-Butyl Alcohol	45	6.874	6.880	-0.006	97	2687359	1800.0	1824.9	
63 cis-1,2-Dichloroethene	96	6.881	6.888	-0.007	86	3451041	60.0	57.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.910	6.909	0.001	90	5070804	60.0	60.6	
67 Chlorobromomethane	128	7.081	7.088	-0.007	94	1190411	60.0	57.0	
68 Chloroform	83	7.088	7.095	-0.007	96	5748805	60.0	56.7	
69 Tetrahydrofuran	42	7.117	7.116	0.001	91	752088	120.0	121.0	
70 Isobutyl alcohol	41	7.296	7.295	0.001	91	969974	1500.0	1515.7	
71 1,1,1-Trichloroethane	97	7.303	7.302	0.001	98	5762174	60.0	61.0	
72 Cyclohexane	56	7.367	7.374	-0.007	96	7902223	60.0	59.4	
73 1,1-Dichloropropene	75	7.403	7.410	-0.007	95	5217651	60.0	57.7	
74 Carbon tetrachloride	117	7.439	7.445	-0.006	97	5264124	60.0	62.6	
76 1,2-Dichloroethane	62	7.582	7.581	0.001	98	3331891	60.0	57.0	
77 Benzene	78	7.589	7.595	-0.006	99	12938608	60.0	52.8	
14 n-Heptane	43	7.646	7.653	-0.007	94	7677984	60.0	57.6	
79 Trichloroethene	95	8.054	8.053	0.001	97	3725890	60.0	57.9	
80 2-Pentanone	43	8.097	8.103	-0.006	98	3830284	240.0	237.6	
82 Methylcyclohexane	55	8.232	8.232	0.000	95	6198380	60.0	58.2	
83 1,2-Dichloropropane	63	8.240	8.246	-0.006	91	3135182	60.0	53.6	
84 1,4-Dioxane	88	8.297	8.296	0.001	95	248210	1200.0	1214.2	
85 Dibromomethane	93	8.347	8.346	0.001	96	1149242	60.0	58.8	
86 Dichlorobromomethane	83	8.411	8.418	-0.007	99	3842384	60.0	61.7	
87 2-Chloroethyl vinyl ether	63	8.547	8.546	0.001	93	997613	60.0	61.8	
89 cis-1,3-Dichloropropene	75	8.726	8.725	0.001	92	4228488	60.0	58.6	
90 4-Methyl-2-pentanone (MIBK)	43	8.776	8.782	-0.006	99	5209341	240.0	235.9	
91 Toluene	91	8.990	8.997	-0.007	97	13149891	60.0	52.0	
92 Ethyl methacrylate	69	9.069	9.076	-0.007	94	1992402	60.0	59.5	
93 trans-1,3-Dichloropropene	75	9.098	9.097	0.001	99	3029705	60.0	59.1	
94 1,1,2-Trichloroethane	97	9.255	9.261	-0.006	94	1594239	60.0	58.9	
95 2-Hexanone	43	9.362	9.369	-0.007	99	3534346	240.0	237.5	
96 1,3-Dichloropropane	76	9.391	9.397	-0.006	97	2980536	60.0	55.5	
97 Tetrachloroethene	164	9.405	9.404	0.001	98	3007241	60.0	57.2	
98 Chlorodibromomethane	129	9.591	9.590	0.001	91	2058463	60.0	59.5	
100 Ethylene Dibromide	107	9.713	9.719	-0.006	98	1481137	60.0	61.4	
101 1-Chlorohexane	91	9.927	9.926	0.001	89	5055022	60.0	57.7	
102 Chlorobenzene	112	10.049	10.048	0.001	97	8126373	60.0	53.1	
103 Ethylbenzene	106	10.077	10.077	0.000	96	5040569	60.0	54.8	e
104 1,1,2-Tetrachloroethane	131	10.084	10.084	0.000	96	2691138	60.0	59.2	
105 m-Xylene & p-Xylene	106	10.156	10.155	0.001	96	6215565	60.0	55.8	a
107 o-Xylene	106	10.478	10.477	0.001	83	5607681	60.0	55.0	
106 Styrene	104	10.478	10.477	0.001	83	8394407	60.0	56.2	
108 Bromoform	173	10.692	10.691	0.001	96	965354	60.0	60.0	
109 Isopropylbenzene	105	10.735	10.734	0.001	98	14591537	60.0	50.6	e
111 Cyclohexanone	55	10.885	10.884	0.001	96	1700543	2400.0	2437.5	
112 1,1,2,2-Tetrachloroethane	83	10.957	10.956	0.001	95	1624182	60.0	56.9	
113 trans-1,4-Dichloro-2-butene	53	10.985	10.992	-0.007	91	496877	60.0	59.5	
114 1,2,3-Trichloropropane	110	11.028	11.027	0.001	91	459999	60.0	58.5	
115 N-Propylbenzene	120	11.057	11.056	0.001	95	4580199	60.0	55.7	
116 Bromobenzene	156	11.071	11.070	0.001	98	3014124	60.0	55.2	
117 1,3,5-Trimethylbenzene	105	11.164	11.163	0.001	96	12374780	60.0	53.5	
118 2-Chlorotoluene	126	11.186	11.185	0.001	96	3650294	60.0	54.6	
119 4-Chlorotoluene	126	11.264	11.263	0.001	98	3714797	60.0	56.6	
120 tert-Butylbenzene	119	11.472	11.471	0.001	92	13248365	60.0	55.7	
121 1,2,4-Trimethylbenzene	105	11.500	11.499	0.001	97	12509487	60.0	53.4	
122 sec-Butylbenzene	134	11.650	11.650	0.000	96	3957928	60.0	58.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.743	11.743	0.001	94	14212577	60.0	53.3	
124 1,3-Dichlorobenzene	146	11.829	11.828	0.001	96	6525666	60.0	54.7	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	91	6267171	60.0	52.7	
127 n-Butylbenzene	91	12.115	12.114	0.001	96	14267238	60.0	53.1	
128 1,2-Dichlorobenzene	146	12.265	12.264	0.001	95	5443917	60.0	54.7	
129 1,2-Dibromo-3-Chloropropan	157	13.045	13.044	0.001	80	270403	60.0	61.3	
130 1,2,4-Trichlorobenzene	180	14.010	14.009	0.001	94	4138644	60.0	60.0	
131 Hexachlorobutadiene	225	14.153	14.152	0.001	98	3017081	60.0	57.2	
132 Naphthalene	128	14.396	14.395	0.001	98	5584485	60.0	60.8	
133 1,2,3-Trichlorobenzene	180	14.725	14.724	0.001	95	3242509	60.0	59.5	
S 140 1,2-Dichloroethene, Total	96				0		120.0	113.7	
S 138 1,2-Dichloroethene, Total	1				0		120.0	113.7	
S 139 Xylenes, Total	106				0		120.0	110.8	
S 137 1,3-Dichloropropene, Total	1				0		120.0	117.7	
S 134 Trihalomethanes, Total	1				0		240.0	237.9	
S 135 Xylenes, Total (URS)	1				0		120.0	110.8	
S 136 Total BTEX	1				0			270.4	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-2cleve+AVA_00010	Amount Added: 30.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 30.00	Units: uL
MV-Main A_00022	Amount Added: 30.00	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 21:55:46

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D

Injection Date: 02-Jun-2015 14:13:30

Instrument ID: VMS_P

Lims ID: STD60

Operator ID: SEIFERTJ

Client ID:

Worklist Smp#: 18

Purge Vol: 20.000 mL

Method: AQ_VMSP_8260

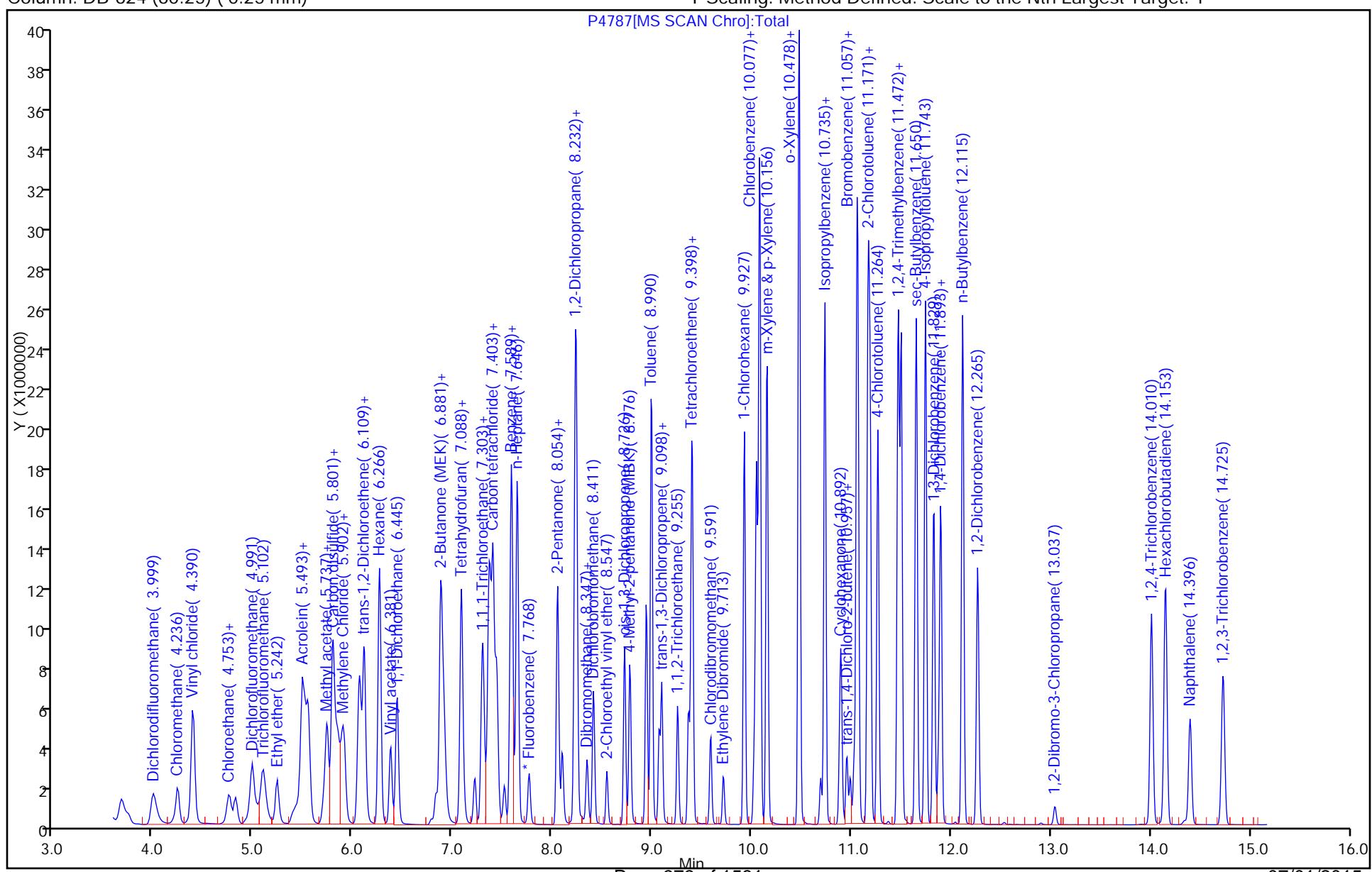
Column: DB-624 (60.25) (0.25 mm)

Dil. Factor: 1.0000

Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 17

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



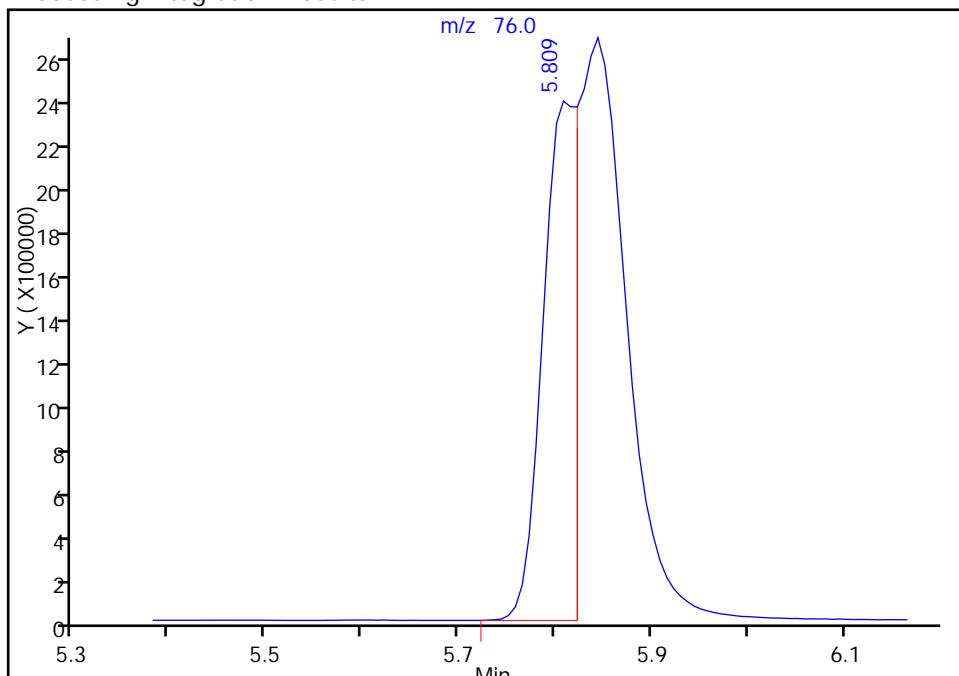
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Injection Date: 02-Jun-2015 14:13:30 Instrument ID: VMS_P
 Lims ID: STD60
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

48 Carbon disulfide, CAS: 75-15-0

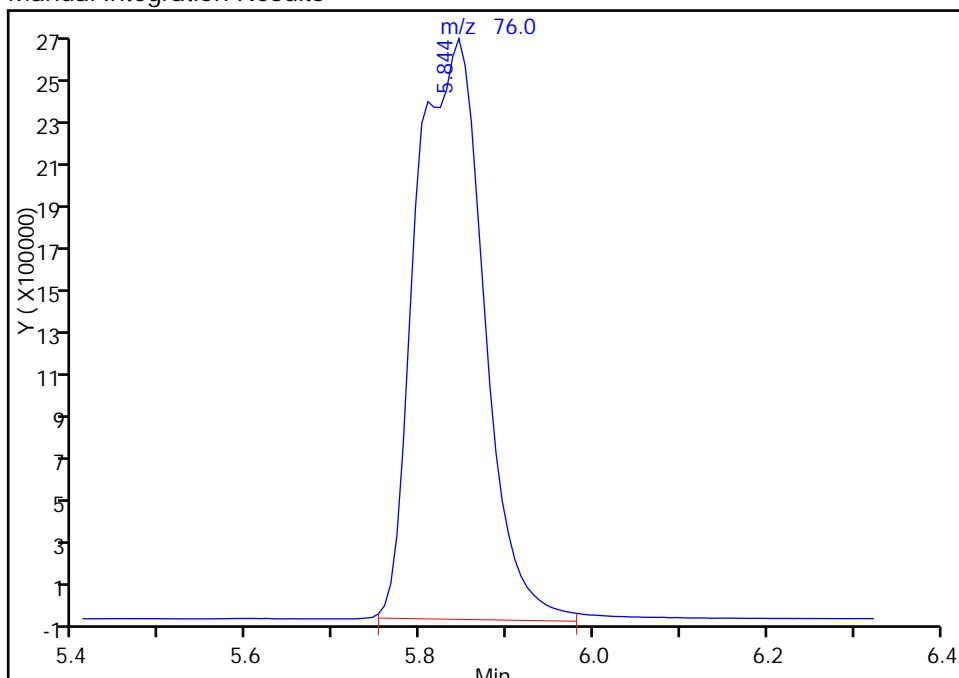
RT: 5.81
 Area: 5980512
 Amount: 22.277531
 Amount Units: ug/l

Processing Integration Results



RT: 5.84
 Area: 14416049
 Amount: 58.808977
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 02-Jun-2015 14:48:58

Audit Action: Manually Integrated

Audit Reason: Split Peak

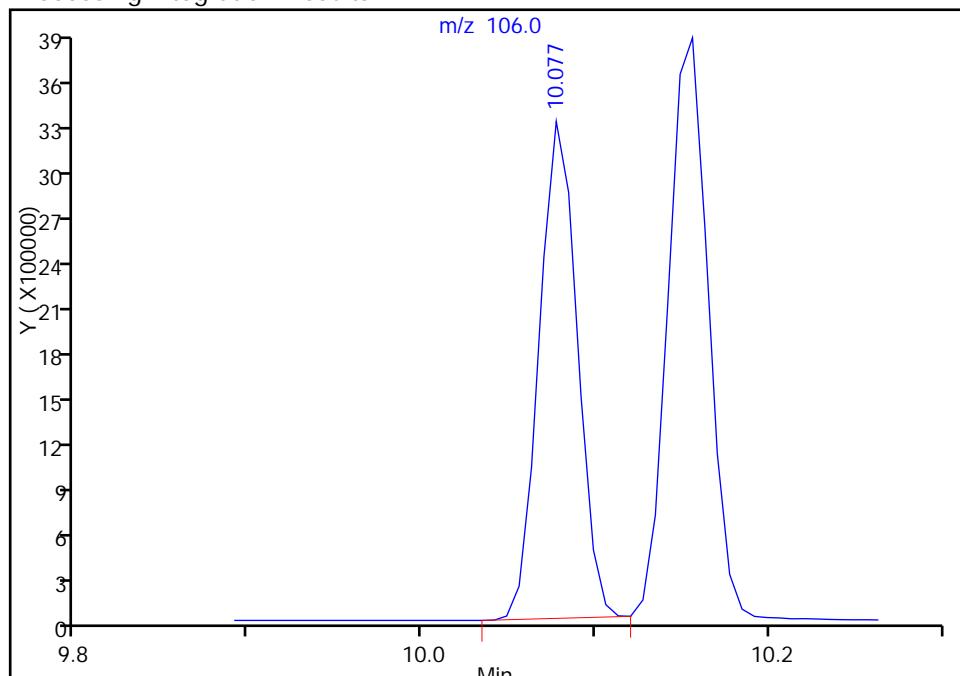
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Injection Date: 02-Jun-2015 14:13:30 Instrument ID: VMS_P
 Lims ID: STD60
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

105 m-Xylene & p-Xylene, CAS: 179601-23-1

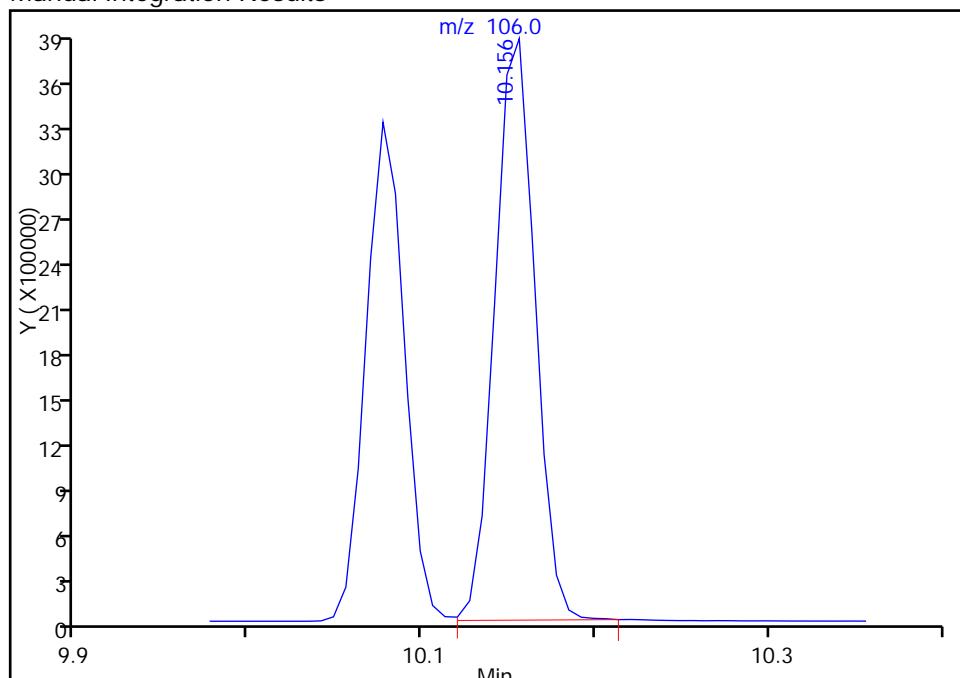
RT: 10.08
 Area: 5040569
 Amount: 60.079000
 Amount Units: ug/l

Processing Integration Results



RT: 10.16
 Area: 6215565
 Amount: 55.787292
 Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 02-Jun-2015 16:48:12

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: ICV 280-279265/22

Calibration Date: 05/28/2015 02:55

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H2956.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.6614		11.0	10.0	9.7	20.0
Chloromethane	Ave	0.3892	0.4179	0.1000	10.7	10.0	7.4	20.0
Vinyl chloride	Ave	0.3807	0.4032		10.6	10.0	5.9	20.0
Bromomethane	Ave	0.3159	0.3404		10.8	10.0	7.8	20.0
Chloroethane	Ave	0.2314	0.2477		10.7	10.0	7.0	20.0
Dichlorofluoromethane	Ave	0.8394	0.8955		10.7	10.0	6.7	20.0
Trichlorofluoromethane	Ave	0.7509	0.8161		10.9	10.0	8.7	20.0
Ethyl ether	Ave	0.1983	0.1962		9.89	10.0	-1.1	20.0
Acrolein	Ave	0.0137	0.0124		90.8	100	-9.2	20.0
1,1-Dichloroethene	Ave	0.3733	0.3787		10.1	10.0	1.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5088	0.5309		10.4	10.0	4.3	20.0
Acetone	Ave	0.0389	0.0370		38.0	40.0	-5.0	20.0
Iodomethane	Ave	0.8401	0.8818		10.5	10.0	5.0	20.0
Carbon disulfide	Ave	1.439	1.424		9.90	10.0	-1.0	20.0
3-Chloro-1-propene	Ave	0.8666	0.7919		9.14	10.0	-8.6	20.0
Methyl acetate	Ave	0.1259	0.1246		49.5	50.0	-1.1	20.0
Methylene Chloride	Lin2		0.3442		10.4	10.0	4.2	20.0
tert-Butyl alcohol	Lin1		1.326		109	100	9.5	20.0
Acrylonitrile	Ave	0.0326	0.0315		96.7	100	-3.3	20.0
Methyl tert-butyl ether	Ave	0.7116	0.6949		9.76	10.0	-2.4	20.0
trans-1,2-Dichloroethene	Ave	0.4200	0.4389		10.5	10.0	4.5	20.0
Hexane	Ave	3.353	3.719		11.1	10.0	10.9	20.0
1,1-Dichloroethane	Ave	0.8867	0.8882	0.1000	10.0	10.0	0.2	20.0
Vinyl acetate	Ave	0.5491	0.5334		19.4	20.0	-2.9	20.0
2,2-Dichloropropane	Lin2		0.7691		9.75	10.0	-2.5	20.0
2-Butanone (MEK)	Ave	0.0717	0.0732		40.8	40.0	2.1	20.0
cis-1,2-Dichloroethene	Ave	0.4232	0.4285		10.1	10.0	1.3	20.0
sec-Butyl Alcohol	Ave	1.790	1.661		278	300	-7.2	20.0
Bromochloromethane	Ave	0.1857	0.1882		10.1	10.0	1.3	20.0
Tetrahydrofuran	Ave	0.0516	0.0517		20.0	20.0	0.0	20.0
Chloroform	Ave	0.8281	0.8335		10.1	10.0	0.7	20.0
1,1,1-Trichloroethane	Ave	0.7908	0.8102		10.2	10.0	2.5	20.0
Cyclohexane	Ave	0.8724	0.8797		10.1	10.0	0.8	20.0
1,1-Dichloropropene	Ave	0.7089	0.7479		10.6	10.0	5.5	20.0
Carbon tetrachloride	Ave	0.7352	0.7854		10.7	10.0	6.8	20.0
Isobutyl alcohol	Ave	0.6270	0.6714		268	250	7.1	20.0
Benzene	Ave	1.309	1.346		10.3	10.0	2.8	20.0
1,2-Dichloroethane	Ave	0.3956	0.3803		9.61	10.0	-3.9	20.0
Trichloroethene	Ave	0.5325	0.5702		10.7	10.0	7.1	20.0
2-Pentanone	Ave	0.1989	0.1854		37.3	40.0	-6.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: ICV 280-279265/22

Calibration Date: 05/28/2015 02:55

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H2956.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.7772	0.8206		10.6	10.0	5.6	20.0
1,2-Dichloropropane	Ave	0.5231	0.5086		9.72	10.0	-2.8	20.0
Dibromomethane	Ave	0.2607	0.2478		9.50	10.0	-5.0	20.0
1,4-Dioxane	Lin2		0.0014		191	200	-4.6	20.0
Bromodichloromethane	Ave	0.7613	0.7458		9.80	10.0	-2.0	20.0
2-Chloroethyl vinyl ether	Ave	0.0935	0.0811		8.68	10.0	-13.2	20.0
cis-1,3-Dichloropropene	Ave	2.945	3.205		10.9	10.0	8.8	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2571		38.7	40.0	-3.3	20.0
Toluene	Ave	1.501	1.516		10.1	10.0	1.0	20.0
trans-1,3-Dichloropropene	Ave	0.4794	0.5122		10.7	10.0	6.8	20.0
Ethyl methacrylate	Ave	1.808	1.898		10.5	10.0	5.0	20.0
1,1,2-Trichloroethane	Ave	0.3008	0.2820		9.37	10.0	-6.3	20.0
Tetrachloroethene	Ave	2.034	2.266		11.1	10.0	11.5	20.0
1,3-Dichloropropane	Ave	2.292	2.264		9.88	10.0	-1.2	20.0
2-Hexanone	Lin1		0.8226		39.7	40.0	-0.8	20.0
Chlorodibromomethane	Ave	2.231	2.349		10.5	10.0	5.3	20.0
1,2-Dibromoethane	Ave	1.573	1.645		10.5	10.0	4.6	20.0
1-Chlorohexane	Ave	3.436	3.755		10.9	10.0	9.3	20.0
Chlorobenzene	Ave	4.483	4.770	0.3000	10.6	10.0	6.4	20.0
1,1,1,2-Tetrachloroethane	Ave	2.164	2.290		10.6	10.0	5.8	20.0
Ethylbenzene	Ave	2.285	2.484		10.9	10.0	8.7	20.0
m-Xylene & p-Xylene	Ave	3.107	3.420		11.0	10.0	10.1	20.0
o-Xylene	Ave	2.726	2.984		10.9	10.0	9.5	20.0
Styrene	Ave	4.408	4.616		10.5	10.0	4.7	20.0
Bromoform	Ave	1.204	1.292	0.1000	10.7	10.0	7.3	20.0
Isopropylbenzene	Ave	5.356	5.573		10.4	10.0	4.0	20.0
Cyclohexanone	Lin1		0.0294		425	400	6.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.115	1.055	0.3000	9.47	10.0	-5.3	20.0
Bromobenzene	Ave	1.235	1.270		10.3	10.0	2.8	20.0
1,2,3-Trichloropropene	Ave	0.2607	0.2499		9.59	10.0	-4.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.2705		9.25	10.0	-7.5	20.0
N-Propylbenzene	Ave	1.311	1.338		10.2	10.0	2.0	20.0
2-Chlorotoluene	Ave	1.016	1.027		10.1	10.0	1.1	20.0
1,3,5-Trimethylbenzene	Ave	4.052	4.149		10.2	10.0	2.4	20.0
4-Chlorotoluene	Ave	1.313	1.422		10.8	10.0	8.3	20.0
tert-Butylbenzene	Ave	4.395	4.503		10.2	10.0	2.5	20.0
1,2,4-Trimethylbenzene	Ave	3.849	3.915		10.2	10.0	1.7	20.0
sec-Butylbenzene	Ave	1.160	1.242		10.7	10.0	7.0	20.0
1,3-Dichlorobenzene	Ave	1.876	1.845		9.84	10.0	-1.6	20.0
p-Isopropyltoluene	Ave	4.989	5.302		10.6	10.0	6.3	20.0
1,4-Dichlorobenzene	Ave	2.898	3.084		10.6	10.0	6.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICV 280-279265/22 Calibration Date: 05/28/2015 02:55
Instrument ID: VMS_H Calib Start Date: 05/28/2015 00:18
GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 05/28/2015 05:10
Lab File ID: H2956.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	5.241	5.493		10.5	10.0	4.8	20.0
1,2-Dichlorobenzene	Ave	1.969	2.010		10.2	10.0	2.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1839	0.1990		10.8	10.0	8.2	20.0
1,2,4-Trichlorobenzene	Ave	1.323	1.501		11.3	10.0	13.5	20.0
Hexachlorobutadiene	Ave	1.379	1.597		11.6	10.0	15.9	20.0
Naphthalene	Ave	1.505	1.719		11.4	10.0	14.2	20.0
1,2,3-Trichlorobenzene	Ave	1.042	1.233		11.8	10.0	18.4	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2956.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 28-May-2015 02:55:30 ALS Bottle#: 10 Worklist Smp#: 22
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: icv
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist:
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 23:04:11 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: wickhamt Date: 28-May-2015 06:38:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.971	3.975	-0.004	6	197253	250.0	250.0	
* 2 Fluorobenzene	96	6.774	6.760	0.014	93	1091127	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.109	11.113	-0.005	90	229810	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.120	14.107	0.013	77	395522	12.5	12.5	
28 Dichlorodifluoromethane	85	2.160	2.164	-0.004	98	577293	10.0	11.0	
30 Chloromethane	50	2.264	2.269	-0.005	87	364816	10.0	10.7	
31 Butadiene	54	2.369	2.373	-0.004	0	281037	NC	NC	
32 Vinyl chloride	62	2.386	2.390	-0.004	88	351948	10.0	10.6	
35 Bromomethane	94	2.682	2.669	0.013	83	297140	10.0	10.8	
36 Chloroethane	64	2.752	2.756	-0.004	86	216182	10.0	10.7	
37 Dichlorodifluoromethane	67	2.926	2.930	-0.004	97	781654	10.0	10.7	
38 Trichlorodifluoromethane	101	2.978	2.982	-0.004	98	712403	10.0	10.9	
40 Ethyl ether	59	3.222	3.226	-0.004	87	171255	10.0	9.89	
44 Acrolein	56	3.361	3.365	-0.004	90	108328	100.0	90.8	
45 1,1-Dichloroethene	96	3.466	3.470	-0.004	94	330565	10.0	10.1	
46 1,1,2-Trichloro-1,2,2-trif	151	3.501	3.487	0.014	91	463410	10.0	10.4	
47 Acetone	43	3.501	3.505	-0.004	19	129090	40.0	38.0	
48 Iodomethane	142	3.640	3.644	-0.004	98	769728	10.0	10.5	
50 Carbon disulfide	76	3.727	3.731	-0.004	99	1243328	10.0	9.90	
53 Methyl acetate	43	3.814	3.818	-0.004	67	543761	50.0	49.5	
52 3-Chloro-1-propene	41	3.814	3.818	-0.004	83	691278	10.0	9.14	
54 Methylene Chloride	84	3.953	3.957	-0.004	93	300425	10.0	10.4	
55 2-Methyl-2-propanol	59	4.075	4.062	0.013	6	104613	100.0	109.5	
57 Acrylonitrile	53	4.197	4.201	-0.004	74	275029	100.0	96.7	
56 Methyl tert-butyl ether	73	4.232	4.236	-0.004	73	606538	10.0	9.76	
58 trans-1,2-Dichloroethene	96	4.232	4.236	-0.004	91	383133	10.0	10.5	
59 Hexane	57	4.510	4.514	-0.004	85	683726	10.0	11.1	
60 1,1-Dichloroethane	63	4.684	4.688	-0.004	96	775301	10.0	10.0	
61 Vinyl acetate	43	4.719	4.723	-0.004	89	931188	20.0	19.4	
65 cis-1,2-Dichloroethene	96	5.363	5.367	-0.004	79	374049	10.0	10.1	
67 2-Butanone (MEK)	43	5.363	5.367	-0.004	46	255616	40.0	40.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	5.363	5.385	-0.022	66	671373	10.0	9.75	
71 sec-Butyl Alcohol	45	5.590	5.576	0.014	72	393054	300.0	278.3	
73 Chlorobromomethane	128	5.642	5.663	-0.021	87	164300	10.0	10.1	
74 Tetrahydrofuran	42	5.712	5.716	-0.004	40	90174	20.0	20.0	
75 Chloroform	83	5.729	5.733	-0.004	89	727578	10.0	10.1	
76 1,1,1-Trichloroethane	97	5.973	5.977	-0.004	88	707229	10.0	10.2	
77 Cyclohexane	56	6.042	6.046	-0.004	93	767893	10.0	10.1	
78 1,1-Dichloropropene	75	6.164	6.168	-0.004	82	652880	10.0	10.6	
79 Carbon tetrachloride	117	6.182	6.186	-0.004	75	685611	10.0	10.7	
80 Isobutyl alcohol	41	6.303	6.290	0.013	54	132428	250.0	267.7	
81 Benzene	78	6.425	6.429	-0.004	94	1175278	10.0	10.3	
82 1,2-Dichloroethane	62	6.443	6.447	-0.004	48	331972	10.0	9.61	
84 n-Heptane	43	6.721	6.725	-0.004	97	1053222	10.0	10.4	
86 Trichloroethene	95	7.244	7.230	0.014	94	497697	10.0	10.7	
88 2-Pentanone	43	7.470	7.474	-0.004	79	647409	40.0	37.3	
89 Methylcyclohexane	55	7.505	7.491	0.014	78	716261	10.0	10.6	
90 1,2-Dichloropropane	63	7.540	7.526	0.014	78	443971	10.0	9.72	
92 Dibromomethane	93	7.696	7.700	-0.004	85	216284	10.0	9.50	
93 1,4-Dioxane	88	7.714	7.718	-0.004	0	24502	200.0	190.8	
94 Dichlorobromomethane	83	7.905	7.892	0.013	95	651032	10.0	9.80	
96 2-Chloroethyl vinyl ether	63	8.288	8.292	-0.004	58	70824	10.0	8.68	
97 cis-1,3-Dichloropropene	75	8.497	8.501	-0.004	80	589287	10.0	10.9	
98 4-Methyl-2-pentanone (MIBK)	43	8.723	8.710	0.013	91	897783	40.0	38.7	
99 Toluene	91	8.967	8.971	-0.004	93	1323699	10.0	10.1	
100 trans-1,3-Dichloropropene	75	9.280	9.285	-0.005	88	447059	10.0	10.7	
101 Ethyl methacrylate	69	9.420	9.406	0.014	59	348869	10.0	10.5	
102 1,1,2-Trichloroethane	97	9.542	9.546	-0.004	88	246132	10.0	9.37	
103 Tetrachloroethene	164	9.768	9.772	-0.004	96	416685	10.0	11.1	
104 1,3-Dichloropropane	76	9.803	9.789	0.014	94	416226	10.0	9.88	
105 2-Hexanone	43	9.925	9.929	-0.004	93	604939	40.0	39.7	
108 Chlorodibromomethane	129	10.151	10.155	-0.004	89	431892	10.0	10.5	
109 Ethylene Dibromide	107	10.342	10.329	0.013	94	302419	10.0	10.5	
110 1-Chlorohexane	91	11.126	11.113	0.013	82	690407	10.0	10.9	
111 Chlorobenzene	112	11.161	11.147	0.014	87	876884	10.0	10.6	
112 1,1,2-Tetrachloroethane	131	11.283	11.287	-0.004	79	421001	10.0	10.6	
113 Ethylbenzene	106	11.317	11.322	-0.005	76	456691	10.0	10.9	
114 m-Xylene & p-Xylene	106	11.509	11.496	0.013	98	628758	10.0	11.0	
115 o-Xylene	106	12.066	12.070	-0.004	92	548512	10.0	10.9	
116 Styrene	104	12.101	12.088	0.013	85	848596	10.0	10.5	
117 Bromoform	173	12.345	12.349	-0.004	92	237490	10.0	10.7	
118 Isopropylbenzene	105	12.571	12.558	0.013	67	1763369	10.0	10.4	
120 Cyclohexanone	55	12.693	12.697	-0.004	61	216170	400.0	424.9	
122 Bromobenzene	156	12.954	12.941	0.013	84	401753	10.0	10.3	
121 1,1,2,2-Tetrachloroethane	83	12.954	12.958	-0.004	62	333933	10.0	9.47	
123 1,2,3-Trichloropropane	110	13.006	12.993	0.013	69	79071	10.0	9.59	
124 trans-1,4-Dichloro-2-butene	53	13.024	13.028	-0.004	47	85600	10.0	9.25	
125 N-Propylbenzene	120	13.076	13.080	-0.004	86	423302	10.0	10.2	
126 2-Chlorotoluene	126	13.180	13.184	-0.004	22	324884	10.0	10.1	
127 1,3,5-Trimethylbenzene	105	13.302	13.289	0.013	74	1312720	10.0	10.2	
128 4-Chlorotoluene	126	13.320	13.306	0.014	99	449941	10.0	10.8	
129 tert-Butylbenzene	119	13.685	13.672	0.013	92	1424979	10.0	10.2	
130 1,2,4-Trimethylbenzene	105	13.737	13.724	0.013	93	1238750	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.929	13.916	0.013	79	392936	10.0	10.7	
132 1,3-Dichlorobenzene	146	14.051	14.037	0.014	78	583912	10.0	9.84	
133 4-Isopropyltoluene	119	14.086	14.072	0.014	92	1677698	10.0	10.6	
134 1,4-Dichlorobenzene	146	14.138	14.142	-0.004	81	975875	10.0	10.6	
137 n-Butylbenzene	91	14.521	14.507	0.014	97	1738215	10.0	10.5	
138 1,2-Dichlorobenzene	146	14.538	14.542	-0.004	70	636053	10.0	10.2	
139 1,2-Dibromo-3-Chloropropan	157	15.322	15.326	-0.004	76	62954	10.0	10.8	
141 1,2,4-Trichlorobenzene	180	16.088	16.074	0.014	94	475060	10.0	11.3	a
142 Hexachlorobutadiene	225	16.227	16.231	-0.004	96	505473	10.0	11.6	
143 Naphthalene	128	16.314	16.301	0.013	87	543969	10.0	11.4	
144 1,2,3-Trichlorobenzene	180	16.540	16.527	0.013	95	390166	10.0	11.8	a
S 151 1,2-Dichloroethene, Total	96				0		20.0	20.6	
S 149 1,2-Dichloroethene, Total	1				0		20.0	20.6	
S 150 Xylenes, Total	106				0		20.0	22.0	
S 148 1,3-Dichloropropene, Total	1				0		20.0	21.6	
S 145 Trihalomethanes, Total	1				0		40.0	41.1	
S 146 Xylenes, Total (URS)	1				0		20.0	22.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main B_00009	Amount Added: 5.00	Units: uL
MV-Gas/Ket B_00017	Amount Added: 5.00	Units: uL
MV-SS 2-Cleve_00020	Amount Added: 5.00	Units: uL

Report Date: 02-Jun-2015 23:05:04

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2956.D
 Injection Date: 28-May-2015 02:55:30
 Lims ID: icv
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

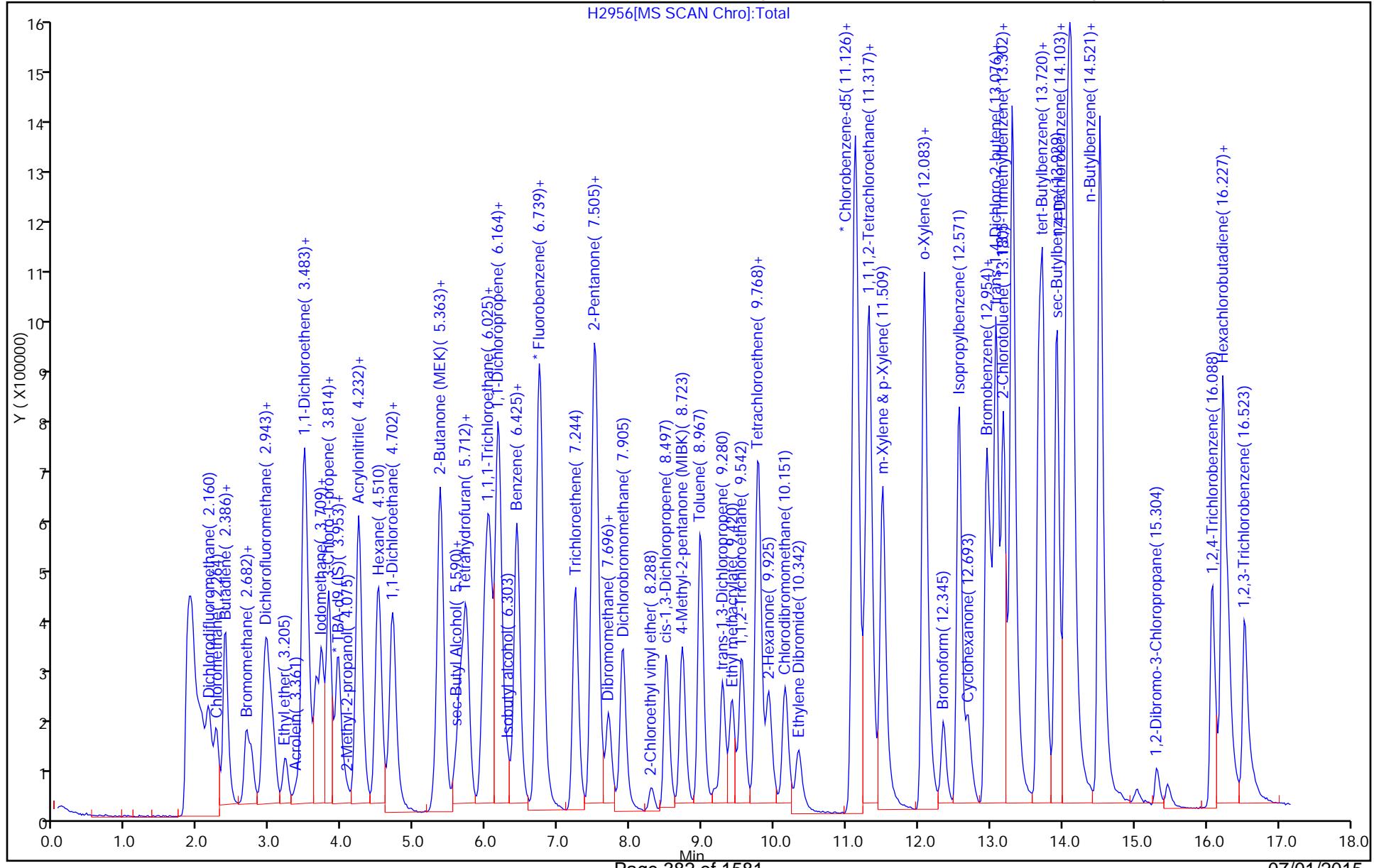
Instrument ID: VMS_H

Operator ID: BERGERB
Worklist Smp#: 22Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 10

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

H2956[MS SCAN Chro]:Total



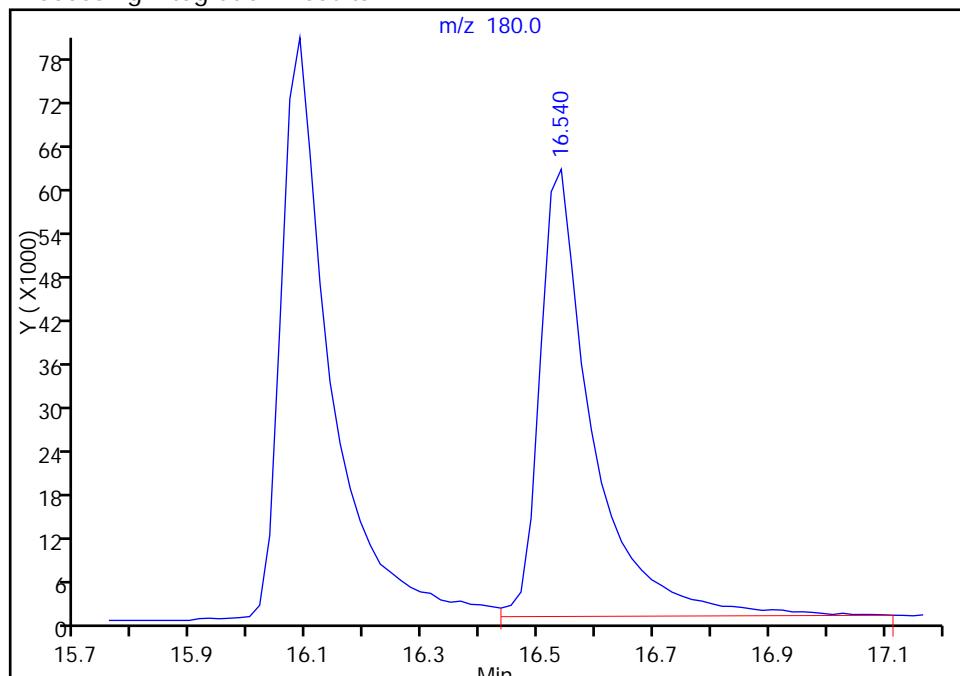
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2956.D
 Injection Date: 28-May-2015 02:55:30 Instrument ID: VMS_H
 Lims ID: icv
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 10 Worklist Smp#: 22
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

141 1,2,4-Trichlorobenzene, CAS: 120-82-1

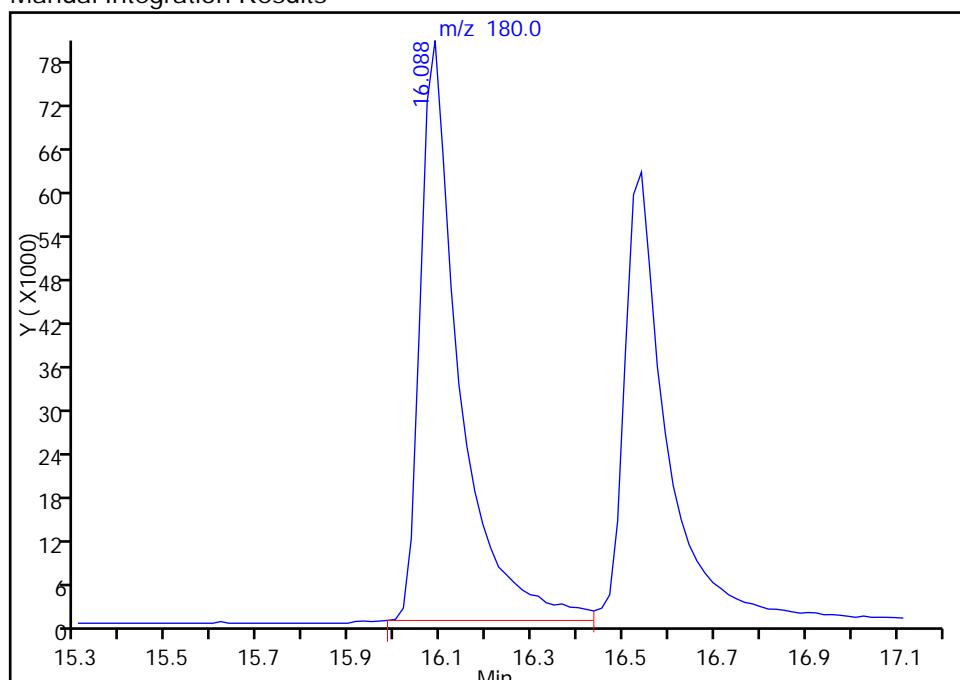
RT: 16.54
 Area: 390166
 Amount: 9.321569
 Amount Units: ug/l

Processing Integration Results



RT: 16.09
 Area: 475060
 Amount: 11.349796
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:07:28

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

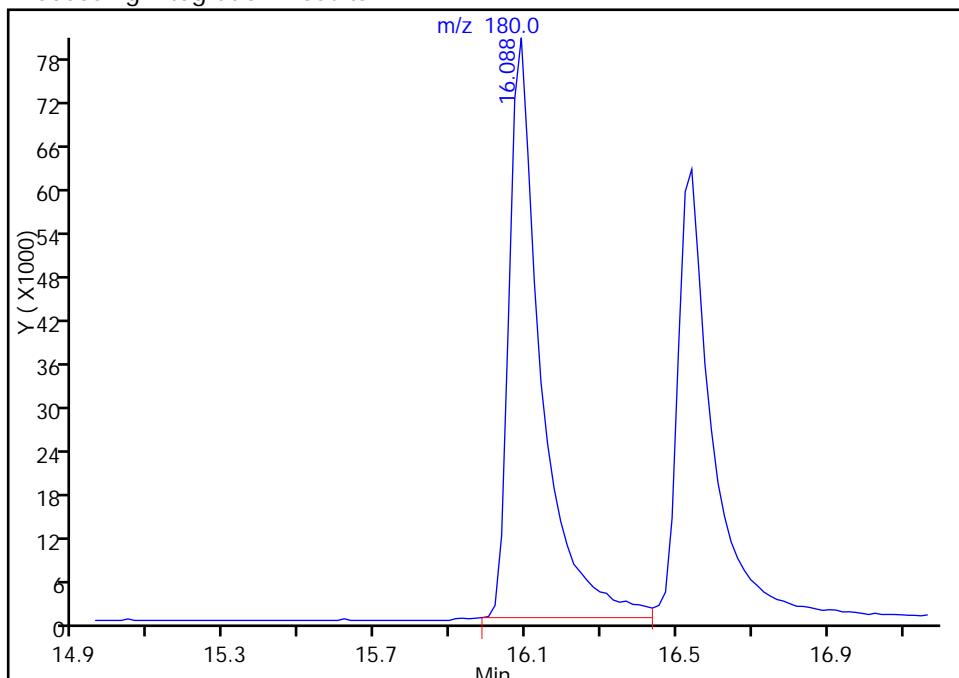
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2956.D
 Injection Date: 28-May-2015 02:55:30 Instrument ID: VMS_H
 Lims ID: icv
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 10 Worklist Smp#: 22
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

144 1,2,3-Trichlorobenzene, CAS: 87-61-6

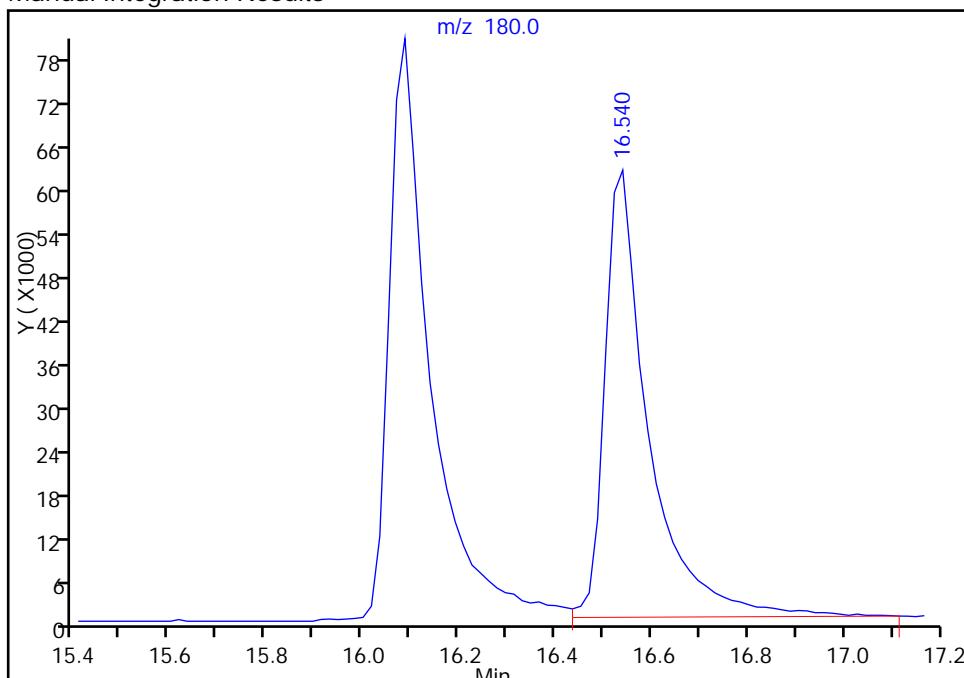
RT: 16.09
 Area: 475060
 Amount: 14.410380
 Amount Units: ug/l

Processing Integration Results



RT: 16.54
 Area: 390166
 Amount: 11.835222
 Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 02-Jun-2015 08:07:28

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Lab Sample ID: ICV 280-279265/23 Calibration Date: 05/28/2015 05:32

Instrument ID: VMS_H Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 05/28/2015 05:10

Lab File ID: H2963.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0007		494	500	-1.2	20.0
Isopropyl alcohol	Lin1		0.0055		88.7	100	-11.3	20.0
Acetonitrile	Lin1		0.0068		87.6	100	-12.4	20.0
Isopropyl ether	Ave	0.2894	0.2975		10.3	10.0	2.8	20.0
2-Chloro-1,3-butadiene	Ave	0.6594	0.6104		9.26	10.0	-7.4	20.0
Tert-butyl ethyl ether	Ave	1.173	1.143		9.74	10.0	-2.6	20.0
Ethyl acetate	Ave	0.1586	0.0758		9.55	20.0	-52.2*	20.0
Propionitrile	Ave	0.0113	0.0105		92.9	100	-7.1	20.0
Methacrylonitrile	Ave	0.0991	0.0961		97.0	100	-3.0	20.0
Tert-amyl methyl ether	Ave	0.9234	0.9401		10.2	10.0	1.8	20.0
n-Butanol	Ave	0.0033	0.0030		227	250	-9.4	20.0
Methyl methacrylate	Ave	0.0554	0.0515		18.6	20.0	-7.1	20.0
2-Nitropropane	Ave	0.0409	0.0376		18.4	20.0	-8.2	20.0
cis-1,4-Dichloro-2-butene	Ave	0.2201	0.2023		9.19	10.0	-8.1	20.0
1,2,3-Trimethylbenzene	Ave	3.344	3.256		9.74	10.0	-2.6	20.0
Dibromofluoromethane (Surr)	Ave	0.6313	0.6147		9.74	10.0	-2.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3497	0.3415		9.76	10.0	-2.4	20.0
Toluene-d8 (Surr)	Ave	6.098	5.438		8.92	10.0	-10.8	20.0
4-Bromofluorobenzene (Surr)	Ave	2.139	2.033		9.50	10.0	-5.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2963.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 28-May-2015 05:32:30 ALS Bottle#: 17 Worklist Smp#: 23
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: icv
 Operator ID: BERGERB Instrument ID: VMS_H
 Sublist:
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:23 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: wickhamt Date: 28-May-2015 06:59:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.972	3.974	-0.002	99	204860	250.0	250.0	
* 2 Fluorobenzene	96	6.758	6.759	-0.001	98	1164628	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.110	11.094	0.016	93	280885	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.122	14.106	0.016	98	430424	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.922	5.924	-0.002	93	572757	10.0	9.74	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.340	6.342	-0.002	83	318128	10.0	9.76	
\$ 10 Toluene-d8 (Surr)	98	8.882	8.883	-0.001	95	1222071	10.0	8.92	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.764	12.766	-0.002	81	700042	10.0	9.50	
34 Ethylene oxide	43	2.632	2.633	-0.001	99	932781	2000.0	1631.5	
39 Ethanol	45	3.189	3.156	0.033	97	34023	500.0	493.9	
43 Propene oxide	58	3.293	3.295	-0.002	96	951459	500.0	435.8	
49 Isopropyl alcohol	45	3.641	3.626	0.015	91	50985	100.0	88.7	
51 Acetonitrile	41	3.816	3.817	-0.001	43	63540	100.0	87.6	
62 Isopropyl ether	87	4.738	4.757	-0.019	99	277193	10.0	10.3	
63 2-Chloro-1,3-butadiene	53	4.791	4.792	-0.002	92	568751	10.0	9.26	
64 Tert-butyl ethyl ether	59	5.156	5.175	-0.019	99	1065234	10.0	9.74	
69 Ethyl acetate	43	5.417	5.419	-0.002	99	141175	20.0	9.55	
70 Propionitrile	54	5.452	5.454	-0.002	97	97746	100.0	92.9	
72 Methacrylonitrile	41	5.609	5.610	-0.001	96	895777	100.0	97.0	
83 Tert-amyl methyl ether	73	6.549	6.551	-0.001	96	875908	10.0	10.2	
85 n-Butanol	56	7.158	7.160	-0.002	92	69671	250.0	226.5	
87 Ethyl acrylate	55	7.350	7.351	-0.001	0	243316	NC	NC	
91 Methyl methacrylate	100	7.663	7.665	-0.002	95	95933	20.0	18.6	
95 2-Nitropropane	41	8.203	8.187	0.016	96	69966	20.0	18.4	
107 Tetrahydrothiophene	60	10.118	10.119	-0.001	67	94629	10.0	7.82	
119 cis-1,4-Dichloro-2-butene	53	12.660	12.661	-0.001	93	69653	10.0	9.19	
135 1,2,3-Trimethylbenzene	105	14.192	14.193	-0.001	99	1121122	10.0	9.74	
140 1,3,5-Trichlorobenzene	180	15.515	15.516	-0.001	95	569390	10.0	10.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00002

Amount Added: 1.00 Units: uL

MV-Supp B_00005

Amount Added: 5.00 Units: uL

MV-ARCH SS A_00042

Amount Added: 0.80 Units: uL

Report Date: 28-May-2015 07:24:25

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

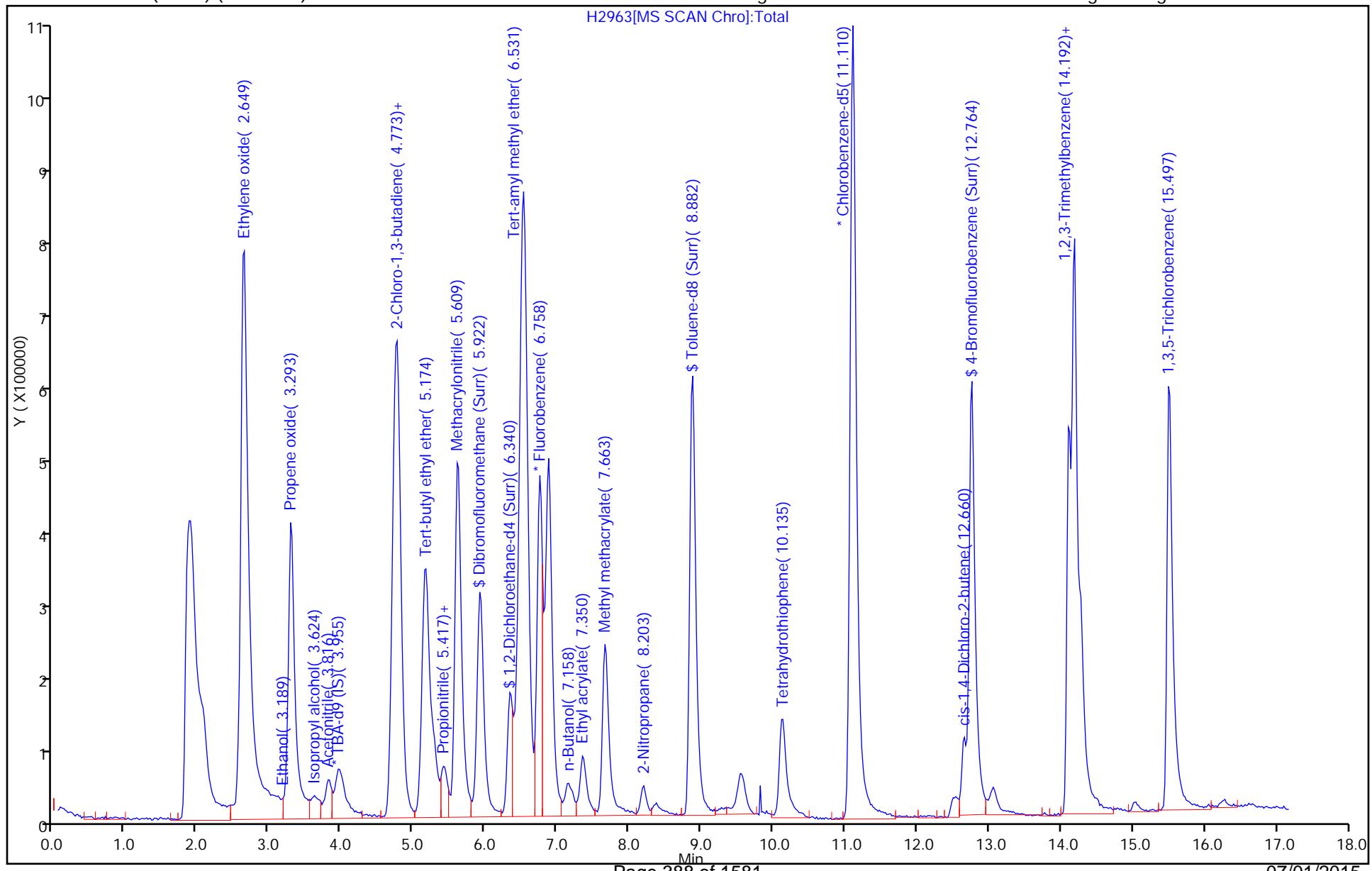
Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2963.D
 Injection Date: 28-May-2015 05:32:30
 Lims ID: icv
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H

Operator ID: BERGERB
Worklist Smp#: 23Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 17

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCV 280-279458/2

Calibration Date: 05/28/2015 19:17

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H2998.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.6116		10.2	10.0	1.5	20.0
Chloromethane	Ave	0.3892	0.3868	0.1000	9.94	10.0	-0.6	20.0
Vinyl chloride	Ave	0.3807	0.3967		10.4	10.0	4.2	20.0
Bromomethane	Ave	0.3159	0.3257		10.3	10.0	3.1	20.0
Chloroethane	Ave	0.2314	0.2457		10.6	10.0	6.2	20.0
Dichlorofluoromethane	Ave	0.8394	0.9017		10.7	10.0	7.4	20.0
Trichlorofluoromethane	Ave	0.7509	0.8035		10.7	10.0	7.0	20.0
Ethyl ether	Ave	0.1983	0.2094		10.6	10.0	5.6	20.0
Acrolein	Ave	0.0137	0.0125		91.2	100	-8.8	20.0
1,1-Dichloroethene	Ave	0.3733	0.3885		10.4	10.0	4.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5088	0.5342		10.5	10.0	5.0	20.0
Acetone	Ave	0.0389	0.0383		39.4	40.0	-1.6	20.0
Iodomethane	Ave	0.8401	0.8279		9.85	10.0	-1.5	20.0
Carbon disulfide	Ave	1.439	1.467		10.2	10.0	1.9	20.0
3-Chloro-1-propene	Ave	0.8666	0.8888		10.3	10.0	2.6	20.0
Methyl acetate	Ave	0.1259	0.1358		53.9	50.0	7.8	20.0
Methylene Chloride	Lin2		0.3673		11.2	10.0	11.5	20.0
tert-Butyl alcohol	Lin1		1.323		109	100	9.2	20.0
Acrylonitrile	Ave	0.0326	0.0341		105	100	4.6	20.0
Methyl tert-butyl ether	Ave	0.7116	0.7360		10.3	10.0	3.4	20.0
trans-1,2-Dichloroethene	Ave	0.4200	0.4304		10.2	10.0	2.5	20.0
Hexane	Ave	3.353	3.618		10.8	10.0	7.9	20.0
1,1-Dichloroethane	Ave	0.8867	0.8710	0.1000	9.82	10.0	-1.8	20.0
Vinyl acetate	Ave	0.5491	0.6059		22.1	20.0	10.3	20.0
2-Butanone (MEK)	Ave	0.0717	0.0823		45.9	40.0	14.8	20.0
cis-1,2-Dichloroethene	Ave	0.4232	0.4247		10.0	10.0	0.3	20.0
2,2-Dichloropropane	Lin2		0.8253		10.5	10.0	5.1	20.0
sec-Butyl Alcohol	Ave	1.790	1.593		267	300	-11.0	20.0
Bromochloromethane	Ave	0.1857	0.1893		10.2	10.0	1.9	20.0
Tetrahydrofuran	Ave	0.0516	0.0532		20.6	20.0	3.0	20.0
Chloroform	Ave	0.8281	0.8196		9.90	10.0	-1.0	20.0
1,1,1-Trichloroethane	Ave	0.7908	0.8158		10.3	10.0	3.2	20.0
Cyclohexane	Ave	0.8724	0.9237		10.6	10.0	5.9	20.0
1,1-Dichloropropene	Ave	0.7089	0.6932		9.78	10.0	-2.2	20.0
Carbon tetrachloride	Ave	0.7352	0.7613		10.4	10.0	3.5	20.0
Isobutyl alcohol	Ave	0.6270	0.5773		230	250	-7.9	20.0
Benzene	Ave	1.309	1.336		10.2	10.0	2.0	20.0
1,2-Dichloroethane	Ave	0.3956	0.3953		9.99	10.0	-0.0	20.0
Trichloroethene	Ave	0.5325	0.5464		10.3	10.0	2.6	20.0
2-Pentanone	Ave	0.1989	0.2162		43.5	40.0	8.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCV 280-279458/2

Calibration Date: 05/28/2015 19:17

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H2998.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.7772	0.8312		10.7	10.0	6.9	20.0
1,2-Dichloropropane	Ave	0.5231	0.5148		9.84	10.0	-1.6	20.0
Dibromomethane	Ave	0.2607	0.2516		9.65	10.0	-3.5	20.0
1,4-Dioxane	Lin2		0.0016		213	200	6.5	20.0
Bromodichloromethane	Ave	0.7613	0.7568		9.94	10.0	-0.6	20.0
2-Chloroethyl vinyl ether	Ave	0.0935	0.0911		9.75	10.0	-2.5	20.0
cis-1,3-Dichloropropene	Ave	2.945	2.953		10.0	10.0	0.3	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.3044		45.8	40.0	14.5	20.0
Toluene	Ave	1.501	1.503		10.0	10.0	0.2	20.0
trans-1,3-Dichloropropene	Ave	0.4794	0.4873		10.2	10.0	1.7	20.0
Ethyl methacrylate	Ave	1.808	1.871		10.3	10.0	3.5	20.0
1,1,2-Trichloroethane	Ave	0.3008	0.2996		9.96	10.0	-0.4	20.0
Tetrachloroethene	Ave	2.034	2.118		10.4	10.0	4.2	20.0
1,3-Dichloropropane	Ave	2.292	2.267		9.89	10.0	-1.1	20.0
2-Hexanone	Lin1		0.9006		43.4	40.0	8.4	20.0
Chlorodibromomethane	Ave	2.231	2.272		10.2	10.0	1.8	20.0
1,2-Dibromoethane	Ave	1.573	1.622		10.3	10.0	3.1	20.0
1-Chlorohexane	Ave	3.436	3.441		10.0	10.0	0.2	20.0
Chlorobenzene	Ave	4.483	4.480	0.3000	9.99	10.0	-0.0	20.0
1,1,1,2-Tetrachloroethane	Ave	2.164	2.173		10.0	10.0	0.4	20.0
Ethylbenzene	Ave	2.285	2.291		10.0	10.0	0.3	20.0
m-Xylene & p-Xylene	Ave	3.107	3.173		10.2	10.0	2.1	20.0
o-Xylene	Ave	2.726	2.725		10.0	10.0	-0.0	20.0
Styrene	Ave	4.408	4.496		10.2	10.0	2.0	20.0
Bromoform	Ave	1.204	1.258	0.1000	10.5	10.0	4.5	20.0
Isopropylbenzene	Ave	5.356	5.289		9.87	10.0	-1.3	20.0
Cyclohexanone	Lin1		0.0289		418	400	4.6	20.0
1,1,2,2-Tetrachloroethane	Ave	1.115	1.109	0.3000	9.95	10.0	-0.5	20.0
Bromobenzene	Ave	1.235	1.227		9.94	10.0	-0.6	20.0
1,2,3-Trichloropropene	Ave	0.2607	0.2537		9.73	10.0	-2.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.2684		9.17	10.0	-8.3	20.0
N-Propylbenzene	Ave	1.311	1.274		9.72	10.0	-2.8	20.0
2-Chlorotoluene	Ave	1.016	1.027		10.1	10.0	1.0	20.0
1,3,5-Trimethylbenzene	Ave	4.052	3.947		9.74	10.0	-2.6	20.0
4-Chlorotoluene	Ave	1.313	1.240		9.45	10.0	-5.5	20.0
tert-Butylbenzene	Ave	4.395	4.287		9.75	10.0	-2.5	20.0
1,2,4-Trimethylbenzene	Ave	3.849	3.663		9.52	10.0	-4.8	20.0
sec-Butylbenzene	Ave	1.160	1.131		9.75	10.0	-2.5	20.0
1,3-Dichlorobenzene	Ave	1.876	1.711		9.12	10.0	-8.8	20.0
p-Isopropyltoluene	Ave	4.989	5.001		10.0	10.0	0.2	20.0
1,4-Dichlorobenzene	Ave	2.898	2.941		10.1	10.0	1.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: CCV 280-279458/2 Calibration Date: 05/28/2015 19:17
Instrument ID: VMS_H Calib Start Date: 05/28/2015 00:18
GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 05/28/2015 05:10
Lab File ID: H2998.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	5.241	5.088		9.71	10.0	-2.9	20.0
1,2-Dichlorobenzene	Ave	1.969	1.898		9.64	10.0	-3.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1839	0.1912		10.4	10.0	4.0	20.0
1,2,3-Trichlorobenzene	Ave	1.042	1.335		10.1	10.0	0.9	20.0
Hexachlorobutadiene	Ave	1.379	1.366		9.90	10.0	-1.0	20.0
Naphthalene	Ave	1.505	1.562		10.4	10.0	3.7	20.0
1,2,4-Trichlorobenzene	Ave	1.323	1.044		10.0	10.0	0.2	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2998.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 28-May-2015 19:17:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: CCV M
 Operator ID: bergerb Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub52
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:54:19 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb

Date:

29-May-2015 17:54:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.988	3.988	0.000	20	246709	250.0	250.0	
* 2 Fluorobenzene	96	6.774	6.774	0.000	92	1179657	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.109	11.109	0.000	86	262602	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.121	14.121	0.000	79	442655	12.5	12.5	
28 Dichlorodifluoromethane	85	2.160	2.160	0.000	98	577204	10.0	10.2	
30 Chloromethane	50	2.265	2.265	0.000	88	365060	10.0	9.94	
31 Butadiene	54	2.386	2.386	0.000	0	299743	NC	NC	
32 Vinyl chloride	62	2.386	2.386	0.000	84	374333	10.0	10.4	
35 Bromomethane	94	2.682	2.682	0.000	88	307379	10.0	10.3	
36 Chloroethane	64	2.752	2.752	0.000	83	231883	10.0	10.6	
37 Dichlorodifluoromethane	67	2.944	2.944	0.000	97	850991	10.0	10.7	
38 Trichlorodifluoromethane	101	3.013	3.013	0.000	99	758307	10.0	10.7	
40 Ethyl ether	59	3.222	3.222	0.000	94	197585	10.0	10.6	
44 Acrolein	56	3.361	3.361	0.000	60	117570	100.0	91.2	
45 1,1-Dichloroethene	96	3.483	3.483	0.000	89	366676	10.0	10.4	
46 1,1,2-Trichloro-1,2,2-trif	151	3.501	3.501	0.000	89	504122	10.0	10.5	
47 Acetone	43	3.518	3.518	0.000	20	144562	40.0	39.4	
48 Iodomethane	142	3.657	3.657	0.000	98	781282	10.0	9.85	
50 Carbon disulfide	76	3.727	3.727	0.000	99	1384713	10.0	10.2	
52 3-Chloro-1-propene	41	3.831	3.831	0.000	92	838757	10.0	10.3	
53 Methyl acetate	43	3.831	3.831	0.000	68	640770	50.0	53.9	
54 Methylene Chloride	84	3.953	3.953	0.000	90	346623	10.0	11.2	
55 2-Methyl-2-propanol	59	4.075	4.075	0.000	6	130582	100.0	109.2	
57 Acrylonitrile	53	4.214	4.214	0.000	69	321401	100.0	104.6	
58 trans-1,2-Dichloroethene	96	4.249	4.249	0.000	88	406195	10.0	10.2	
56 Methyl tert-butyl ether	73	4.249	4.249	0.000	58	694602	10.0	10.3	
59 Hexane	57	4.510	4.510	0.000	94	760177	10.0	10.8	
60 1,1-Dichloroethane	63	4.702	4.702	0.000	95	821954	10.0	9.82	
61 Vinyl acetate	43	4.719	4.719	0.000	90	1143577	20.0	22.1	
67 2-Butanone (MEK)	43	5.363	5.363	0.000	50	310673	40.0	45.9	
66 2,2-Dichloropropane	77	5.381	5.381	0.000	78	778875	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 cis-1,2-Dichloroethene	96	5.363	5.363	0.000	63	400761	10.0	10.0	
71 sec-Butyl Alcohol	45	5.590	5.590	0.000	51	471587	300.0	267.0	
73 Chlorobromomethane	128	5.659	5.659	0.000	79	178638	10.0	10.2	
74 Tetrahydrofuran	42	5.712	5.712	0.000	35	100336	20.0	20.6	
75 Chloroform	83	5.729	5.729	0.000	89	773444	10.0	9.90	
76 1,1,1-Trichloroethane	97	5.990	5.990	0.000	85	769848	10.0	10.3	
77 Cyclohexane	56	6.060	6.060	0.000	87	871686	10.0	10.6	
78 1,1-Dichloropropene	75	6.164	6.164	0.000	76	654202	10.0	9.78	
79 Carbon tetrachloride	117	6.199	6.199	0.000	75	718438	10.0	10.4	
80 Isobutyl alcohol	41	6.304	6.304	0.000	65	142412	250.0	230.2	
81 Benzene	78	6.425	6.425	0.000	93	1260838	10.0	10.2	
82 1,2-Dichloroethane	62	6.443	6.443	0.000	47	373016	10.0	10.0	
84 n-Heptane	43	6.739	6.739	0.000	97	1157387	10.0	10.6	
86 Trichloroethene	95	7.244	7.244	0.000	84	515643	10.0	10.3	
88 2-Pentanone	43	7.470	7.470	0.000	86	815996	40.0	43.5	
89 Methylcyclohexane	55	7.505	7.505	0.000	75	784391	10.0	10.7	
90 1,2-Dichloropropane	63	7.540	7.540	0.000	73	485831	10.0	9.84	
92 Dibromomethane	93	7.714	7.714	0.000	83	237399	10.0	9.65	
93 1,4-Dioxane	88	7.731	7.731	0.000	1	29762	200.0	212.9	
94 Dichlorobromomethane	83	7.905	7.905	0.000	95	714190	10.0	9.94	
96 2-Chloroethyl vinyl ether	63	8.306	8.306	0.000	67	85989	10.0	9.75	
97 cis-1,3-Dichloropropene	75	8.515	8.515	0.000	79	620401	10.0	10.0	
98 4-Methyl-2-pentanone (MIBK)	43	8.724	8.724	0.000	95	1148883	40.0	45.8	
99 Toluene	91	8.985	8.985	0.000	95	1418791	10.0	10.0	
100 trans-1,3-Dichloropropene	75	9.281	9.281	0.000	88	459863	10.0	10.2	
101 Ethyl methacrylate	69	9.420	9.420	0.000	74	392985	10.0	10.3	
102 1,1,2-Trichloroethane	97	9.559	9.559	0.000	90	282769	10.0	9.96	
103 Tetrachloroethene	164	9.768	9.768	0.000	91	445008	10.0	10.4	
104 1,3-Dichloropropane	76	9.803	9.803	0.000	96	476210	10.0	9.89	
105 2-Hexanone	43	9.925	9.925	0.000	76	756773	40.0	43.4	
108 Chlorodibromomethane	129	10.151	10.151	0.000	90	477333	10.0	10.2	
109 Ethylene Dibromide	107	10.343	10.343	0.000	92	340668	10.0	10.3	
110 1-Chlorohexane	91	11.126	11.126	0.000	82	722949	10.0	10.0	
111 Chlorobenzene	112	11.161	11.161	0.000	86	941186	10.0	10.0	
112 1,1,2-Tetrachloroethane	131	11.283	11.283	0.000	75	456565	10.0	10.0	
113 Ethylbenzene	106	11.335	11.335	0.000	80	481357	10.0	10.0	
114 m-Xylene & p-Xylene	106	11.509	11.509	0.000	98	666519	10.0	10.2	
115 o-Xylene	106	12.084	12.084	0.000	87	572539	10.0	10.0	
116 Styrene	104	12.101	12.101	0.000	85	944623	10.0	10.2	
117 Bromoform	173	12.362	12.362	0.000	93	264340	10.0	10.5	
118 Isopropylbenzene	105	12.571	12.571	0.000	86	1872976	10.0	9.87	
120 Cyclohexanone	55	12.693	12.693	0.000	64	243196	400.0	418.4	
122 Bromobenzene	156	12.954	12.954	0.000	94	434600	10.0	9.94	
121 1,1,2,2-Tetrachloroethane	83	12.954	12.954	0.000	53	392812	10.0	9.95	
123 1,2,3-Trichloropropane	110	13.006	13.006	0.000	52	89842	10.0	9.73	
124 trans-1,4-Dichloro-2-butene	53	13.024	13.024	0.000	42	95049	10.0	9.17	
125 N-Propylbenzene	120	13.093	13.093	0.000	85	451198	10.0	9.72	
126 2-Chlorotoluene	126	13.180	13.180	0.000	7	363525	10.0	10.1	
127 1,3,5-Trimethylbenzene	105	13.302	13.302	0.000	74	1397659	10.0	9.74	
128 4-Chlorotoluene	126	13.320	13.320	0.000	96	439256	10.0	9.45	
129 tert-Butylbenzene	119	13.685	13.685	0.000	94	1517961	10.0	9.75	
130 1,2,4-Trimethylbenzene	105	13.738	13.738	0.000	92	1297113	10.0	9.52	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
131 sec-Butylbenzene	134	13.929	13.929	0.000	76	400532	10.0	9.75	
132 1,3-Dichlorobenzene	146	14.051	14.051	0.000	77	605939	10.0	9.12	
133 4-Isopropyltoluene	119	14.086	14.086	0.000	90	1770871	10.0	10.0	
134 1,4-Dichlorobenzene	146	14.138	14.138	0.000	79	1041607	10.0	10.1	
137 n-Butylbenzene	91	14.521	14.521	0.000	97	1801879	10.0	9.71	
138 1,2-Dichlorobenzene	146	14.538	14.538	0.000	69	672161	10.0	9.64	
139 1,2-Dibromo-3-Chloropropan	157	15.322	15.322	0.000	75	67703	10.0	10.4	
144 1,2,3-Trichlorobenzene	180	16.088	16.088	0.000	95	472855	10.0	10.1	
142 Hexachlorobutadiene	225	16.244	16.244	0.000	91	483569	10.0	9.90	
143 Naphthalene	128	16.314	16.314	0.000	94	553046	10.0	10.4	
141 1,2,4-Trichlorobenzene	180	16.540	16.540	0.000	94	369605	10.0	10.0	
S 151 1,2-Dichloroethene, Total	96				0		20.0	20.3	
S 145 Trihalomethanes, Total	1				0		40.0	40.5	
S 146 Xylenes, Total (URS)	1				0		20.0	20.2	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.2	
S 149 1,2-Dichloroethene, Total	1				0		20.0	20.3	
S 150 Xylenes, Total	106				0		20.0	20.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 5.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 5.00	Units: uL

Report Date: 29-May-2015 17:54:20

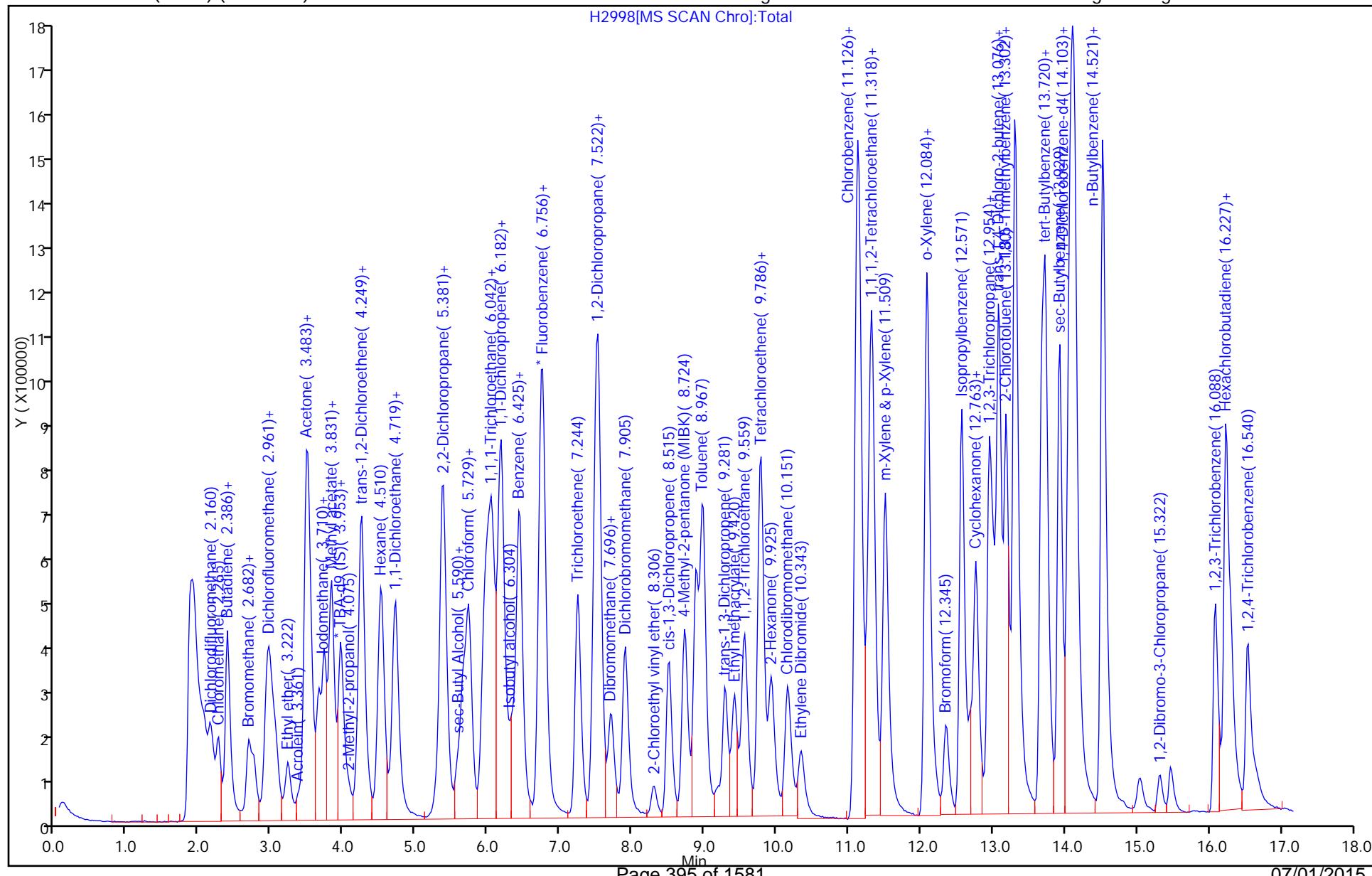
Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2998.D
 Injection Date: 28-May-2015 19:17:30
 Lims ID: CCV
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: bergerb
 Worklist Smp#: 2

ALS Bottle#: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCV 280-279458/3

Calibration Date: 05/28/2015 19:39

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H2999.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0006		428	500	-14.4	20.0
Isopropyl alcohol	Lin1		0.0060		97.8	100	-2.2	20.0
Acetonitrile	Lin1		0.0062		100	125	-19.6	20.0
Isopropyl ether	Ave	0.2894	0.2704		11.7	12.5	-6.6	20.0
2-Chloro-1,3-butadiene	Ave	0.6594	0.6164		9.35	10.0	-6.5	20.0
Tert-butyl ethyl ether	Ave	1.173	1.080		11.5	12.5	-7.9	20.0
Ethyl acetate	Ave	0.1586	0.1639		20.7	20.0	3.3	20.0
Propionitrile	Ave	0.0113	0.0104		115	125	-7.8	20.0
Methacrylonitrile	Ave	0.0991	0.0968		97.7	100	-2.3	20.0
Tert-amyl methyl ether	Ave	0.9234	0.8961		12.1	12.5	-3.0	20.0
n-Butanol	Ave	0.0033	0.0033		252	250	1.0	20.0
Methyl methacrylate	Ave	0.0554	0.0523		18.9	20.0	-5.7	20.0
2-Nitropropane	Ave	0.0409	0.0391		19.1	20.0	-4.5	20.0
cis-1,4-Dichloro-2-butene	Ave	0.2201	0.2163		9.83	10.0	-1.7	20.0
1,2,3-Trimethylbenzene	Ave	3.344	3.049		9.12	10.0	-8.8	20.0
Dibromofluoromethane (Surr)	Ave	0.6313	0.6264		8.43	8.50	-0.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3497	0.3470		8.43	8.50	-0.8	20.0
Toluene-d8 (Surr)	Ave	6.098	6.088		8.49	8.50	-0.2	20.0
4-Bromofluorobenzene (Surr)	Ave	2.139	2.053		8.16	8.50	-4.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2999.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 28-May-2015 19:39:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: CCV S
 Operator ID: bergerb Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub86
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:54:14 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:54:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.976	3.976	0.000	97	231604	250.0	250.0	
* 2 Fluorobenzene	96	6.761	6.761	0.000	98	1204670	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.114	11.114	0.000	93	279293	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.126	14.126	0.000	98	433114	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.926	5.926	0.000	93	513095	8.50	8.43	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.344	6.344	0.000	83	284259	8.50	8.43	
\$ 10 Toluene-d8 (Surr)	98	8.885	8.885	0.000	95	1156254	8.50	8.49	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.768	12.768	0.000	81	604678	8.50	8.16	M
34 Ethylene oxide	43	2.635	2.635	0.000	99	1227513	2000.0	2075.6	
39 Ethanol	45	3.140	3.140	0.000	86	30905	500.0	428.2	
43 Propene oxide	58	3.297	3.297	0.000	95	1157279	500.0	512.5	
49 Isopropyl alcohol	45	3.628	3.628	0.000	36	57705	100.0	97.8	a
51 Acetonitrile	41	3.802	3.802	0.000	99	74306	125.0	100.5	
62 Isopropyl ether	87	4.759	4.759	0.000	99	325730	12.5	11.7	
63 2-Chloro-1,3-butadiene	53	4.794	4.794	0.000	92	594085	10.0	9.35	
64 Tert-butyl ethyl ether	59	5.177	5.177	0.000	99	1301197	12.5	11.5	
69 Ethyl acetate	43	5.421	5.421	0.000	99	315875	20.0	20.7	
70 Propionitrile	54	5.456	5.456	0.000	98	125490	125.0	115.3	
72 Methacrylonitrile	41	5.612	5.612	0.000	97	932674	100.0	97.7	
83 Tert-amyl methyl ether	73	6.552	6.552	0.000	96	1079491	12.5	12.1	
85 n-Butanol	56	7.144	7.144	0.000	95	80314	250.0	252.5	
87 Ethyl acrylate	55	7.353	7.353	0.000	0	252818	NC	NC	
91 Methyl methacrylate	100	7.667	7.667	0.000	96	100791	20.0	18.9	
95 2-Nitropropane	41	8.206	8.206	0.000	96	75304	20.0	19.1	
107 Tetrahydrothiophene	60	10.139	10.139	0.000	59	114018	10.0	9.48	
119 cis-1,4-Dichloro-2-butene	53	12.663	12.663	0.000	95	74954	10.0	9.83	
135 1,2,3-Trimethylbenzene	105	14.195	14.195	0.000	97	1056526	10.0	9.12	
140 1,3,5-Trichlorobenzene	180	15.518	15.518	0.000	95	527281	10.0	9.24	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00011	Amount Added: 5.00	Units: uL	
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:54:15

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2999.D

Injection Date: 28-May-2015 19:39:30

Instrument ID: VMS_H

Lims ID: CCV

Operator ID: bergerb

Client ID:

Worklist Smp#: 3

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

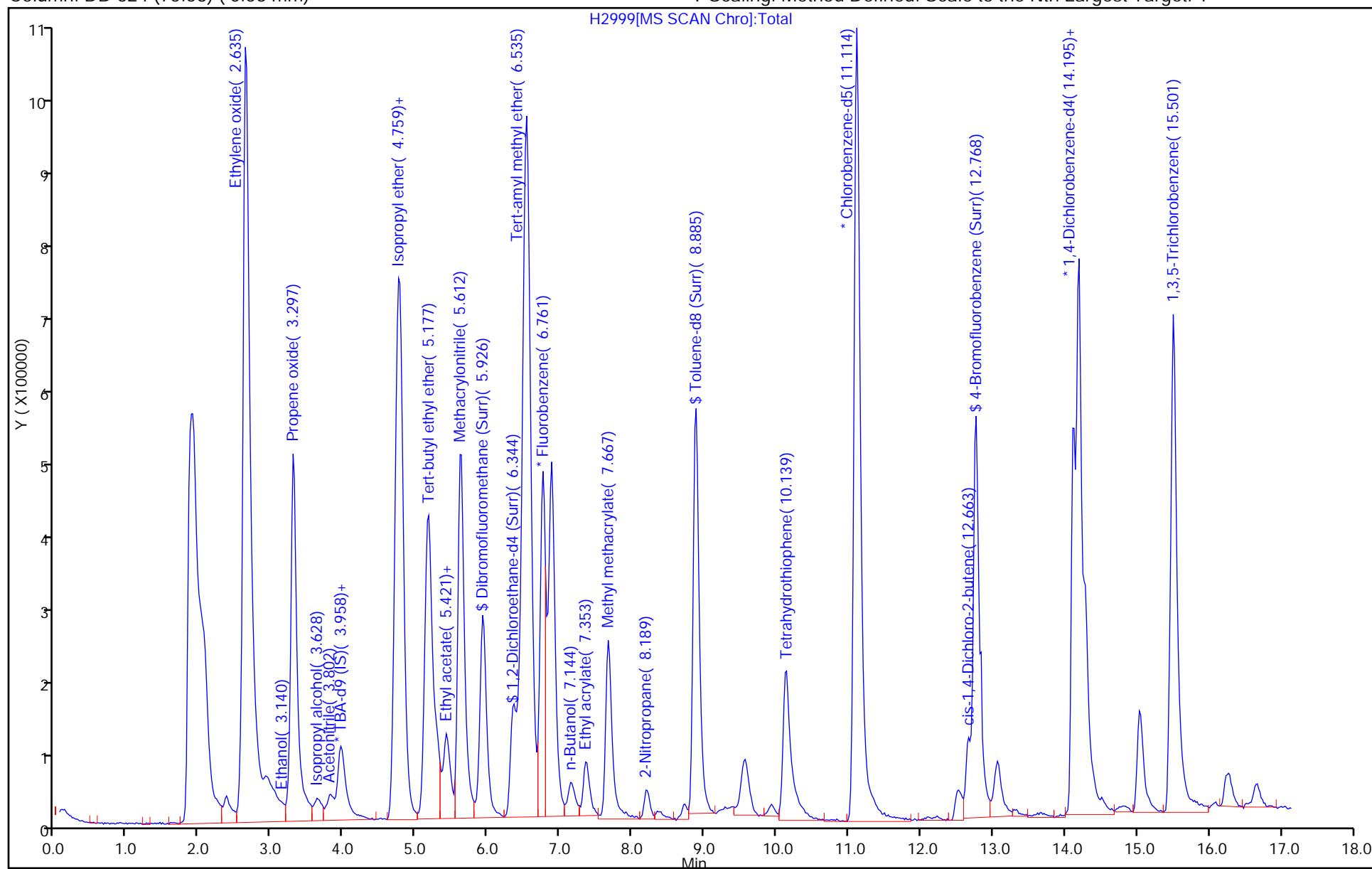
ALS Bottle#: 2

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

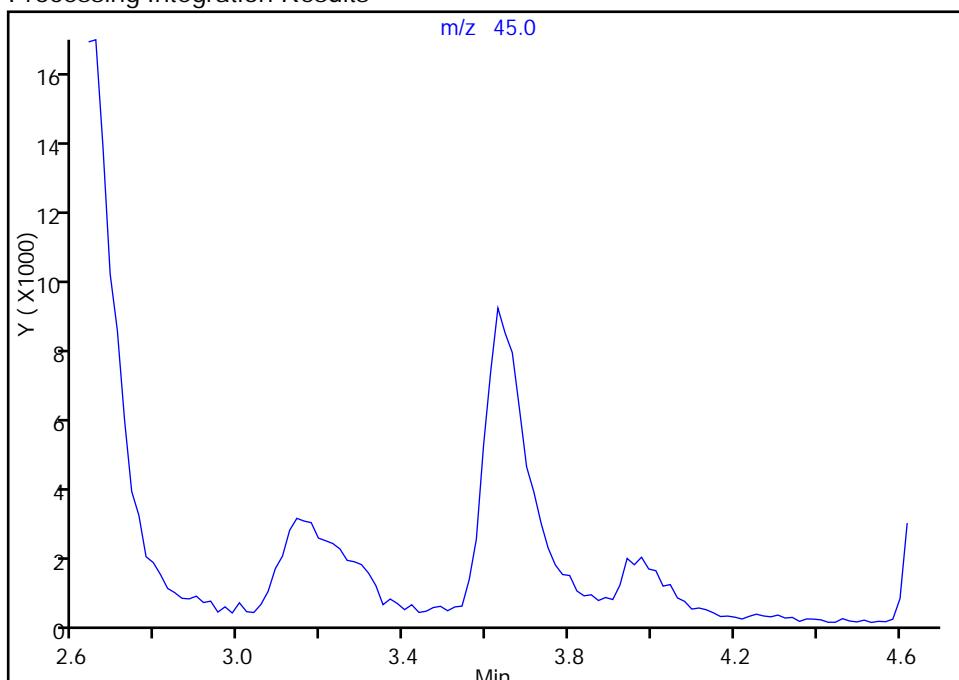
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 Injection Date: 28-May-2015 19:39:30 Instrument ID: VMS_H
 Lims ID: CCV
 Client ID:
 Operator ID: bergerb ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

49 Isopropyl alcohol, CAS: 67-63-0

Not Detected

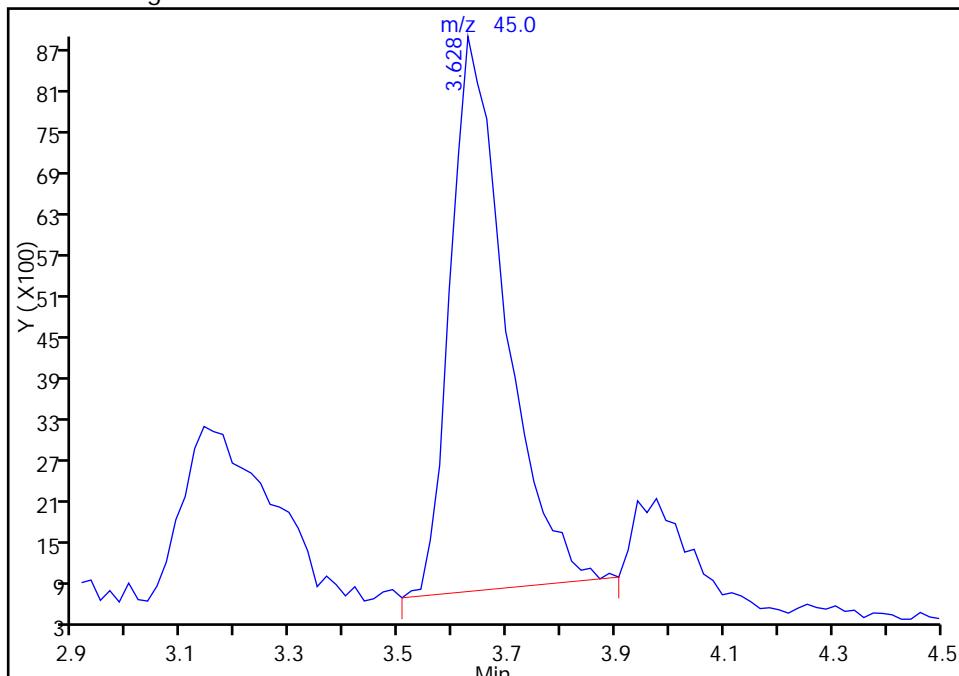
Expected RT: 3.63

Processing Integration Results



Manual Integration Results

RT: 3.63
 Area: 57705
 Amount: 97.770116
 Amount Units: ug/l



Reviewer: bergerb, 28-May-2015 20:12:39

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

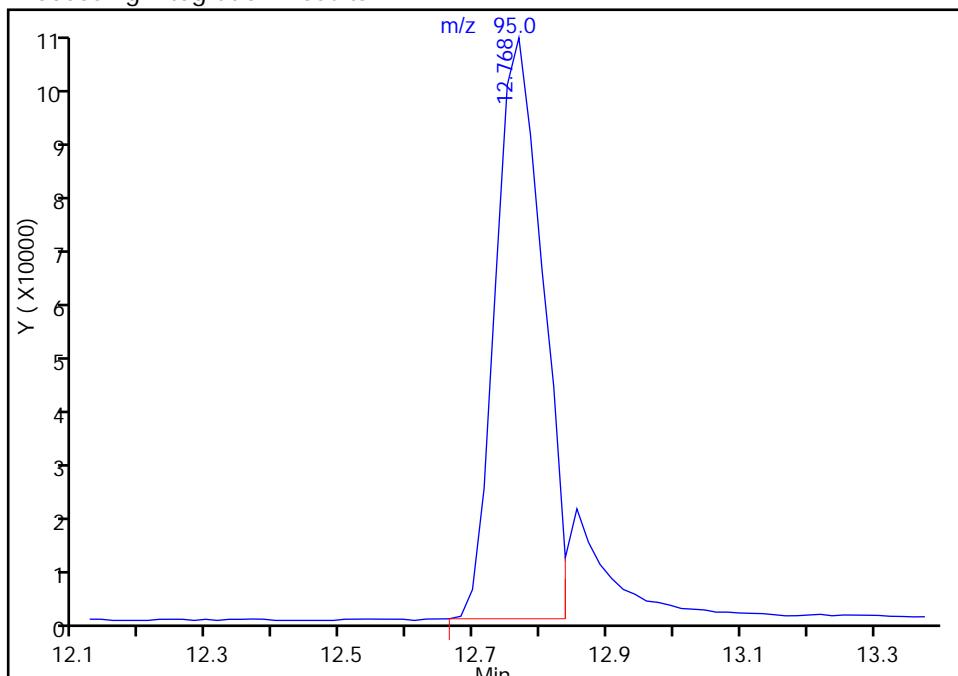
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2999.D
 Injection Date: 28-May-2015 19:39:30 Instrument ID: VMS_H
 Lims ID: CCV
 Client ID:
 Operator ID: bergerb ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

\$ 11 4-Bromofluorobenzene (Surr), CAS: 460-00-4

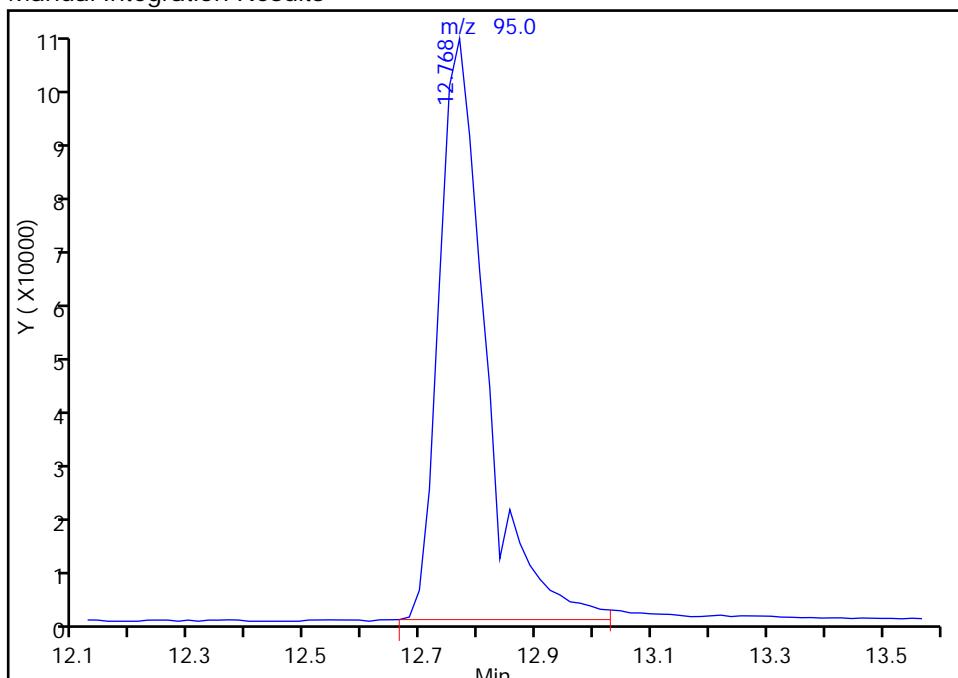
RT: 12.77
 Area: 527166
 Amount: 7.111438
 Amount Units: ug/l

Processing Integration Results



RT: 12.77
 Area: 604678
 Amount: 8.157070
 Amount Units: ug/l

Manual Integration Results



Reviewer: bergerb, 28-May-2015 20:12:39

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCVC 280-279458/33

Calibration Date: 05/29/2015 06:10

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H3027.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.5720		9.50	10.0	-5.0	50.0
Chloromethane	Ave	0.3892	0.3959	0.1000	10.2	10.0	1.7	50.0
Vinyl chloride	Ave	0.3807	0.3806		10.0	10.0	-0.0	50.0
Bromomethane	Ave	0.3159	0.3196		10.1	10.0	1.2	50.0
Chloroethane	Ave	0.2314	0.2367		10.2	10.0	2.3	50.0
Dichlorofluoromethane	Ave	0.8394	0.8830		10.5	10.0	5.2	50.0
Trichlorofluoromethane	Ave	0.7509	0.7574		10.1	10.0	0.9	50.0
Ethyl ether	Ave	0.1983	0.1877		9.46	10.0	-5.4	50.0
Acrolein	Ave	0.0137	0.0097		70.9	100	-29.1	50.0
1,1-Dichloroethene	Ave	0.3733	0.3741		10.0	10.0	0.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5088	0.5028		9.88	10.0	-1.2	50.0
Acetone	Ave	0.0389	0.0353		36.3	40.0	-9.3	50.0
Iodomethane	Ave	0.8401	0.8104		9.65	10.0	-3.5	50.0
Carbon disulfide	Ave	1.439	1.392		9.67	10.0	-3.3	50.0
3-Chloro-1-propene	Ave	0.8666	0.8459		9.76	10.0	-2.4	50.0
Methyl acetate	Ave	0.1259	0.1203		47.8	50.0	-4.5	50.0
Methylene Chloride	Lin2		0.3338		10.1	10.0	0.9	50.0
tert-Butyl alcohol	Lin1		1.285		106	100	6.0	50.0
Acrylonitrile	Ave	0.0326	0.0310		95.1	100	-4.9	50.0
Methyl tert-butyl ether	Ave	0.7116	0.6694		9.41	10.0	-5.9	50.0
trans-1,2-Dichloroethene	Ave	0.4200	0.4057		9.66	10.0	-3.4	50.0
Hexane	Ave	3.353	3.517		10.5	10.0	4.9	50.0
1,1-Dichloroethane	Ave	0.8867	0.8570	0.1000	9.67	10.0	-3.3	50.0
Vinyl acetate	Ave	0.5491	0.4604		16.8	20.0	-16.2	50.0
2-Butanone (MEK)	Ave	0.0717	0.0729		40.7	40.0	1.7	50.0
2,2-Dichloropropane	Lin2		0.7020		8.83	10.0	-11.7	50.0
cis-1,2-Dichloroethene	Ave	0.4232	0.4151		9.81	10.0	-1.9	50.0
sec-Butyl Alcohol	Ave	1.790	1.657		278	300	-7.4	50.0
Bromochloromethane	Ave	0.1857	0.1787		9.62	10.0	-3.8	50.0
Chloroform	Ave	0.8281	0.7970		9.62	10.0	-3.8	50.0
Tetrahydrofuran	Ave	0.0516	0.0472		18.3	20.0	-8.6	50.0
1,1,1-Trichloroethane	Ave	0.7908	0.7855		9.93	10.0	-0.7	50.0
Cyclohexane	Ave	0.8724	0.8735		10.0	10.0	0.1	50.0
1,1-Dichloropropene	Ave	0.7089	0.6772		9.55	10.0	-4.5	50.0
Carbon tetrachloride	Ave	0.7352	0.7247		9.86	10.0	-1.4	50.0
Isobutyl alcohol	Ave	0.6270	0.6693		267	250	6.8	50.0
Benzene	Ave	1.309	1.319		10.1	10.0	0.7	50.0
1,2-Dichloroethane	Ave	0.3956	0.3783		9.56	10.0	-4.4	50.0
Trichloroethene	Ave	0.5325	0.5515		10.4	10.0	3.6	50.0
2-Pentanone	Ave	0.1989	0.1835		36.9	40.0	-7.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCVC 280-279458/33

Calibration Date: 05/29/2015 06:10

Instrument ID: VMS_H

Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm)

Calib End Date: 05/28/2015 05:10

Lab File ID: H3027.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.7772	0.7940		10.2	10.0	2.2	50.0
1,2-Dichloropropane	Ave	0.5231	0.5112		9.77	10.0	-2.3	50.0
Dibromomethane	Ave	0.2607	0.2427		9.31	10.0	-6.9	50.0
1,4-Dioxane	Lin2		0.0014		187	200	-6.7	50.0
Bromodichloromethane	Ave	0.7613	0.7461		9.80	10.0	-2.0	50.0
2-Chloroethyl vinyl ether	Ave	0.0935	0.0775		8.29	10.0	-17.1	50.0
cis-1,3-Dichloropropene	Ave	2.945	2.885		9.80	10.0	-2.0	50.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2728		41.0	40.0	2.6	50.0
Toluene	Ave	1.501	1.475		9.83	10.0	-1.7	50.0
trans-1,3-Dichloropropene	Ave	0.4794	0.4508		9.40	10.0	-6.0	50.0
Ethyl methacrylate	Ave	1.808	1.741		9.63	10.0	-3.7	50.0
1,1,2-Trichloroethane	Ave	0.3008	0.2754		9.15	10.0	-8.5	50.0
Tetrachloroethene	Ave	2.034	2.069		10.2	10.0	1.7	50.0
1,3-Dichloropropane	Ave	2.292	2.156		9.41	10.0	-5.9	50.0
2-Hexanone	Lin1		0.7910		38.2	40.0	-4.6	50.0
Chlorodibromomethane	Ave	2.231	2.208		9.90	10.0	-1.0	50.0
1,2-Dibromoethane	Ave	1.573	1.550		9.85	10.0	-1.5	50.0
1-Chlorohexane	Ave	3.436	3.338		9.71	10.0	-2.9	50.0
Chlorobenzene	Ave	4.483	4.397	0.3000	9.81	10.0	-1.9	50.0
1,1,1,2-Tetrachloroethane	Ave	2.164	2.125		9.82	10.0	-1.8	50.0
Ethylbenzene	Ave	2.285	2.260		9.89	10.0	-1.1	50.0
m-Xylene & p-Xylene	Ave	3.107	3.170		10.2	10.0	2.0	50.0
o-Xylene	Ave	2.726	2.746		10.1	10.0	0.7	50.0
Styrene	Ave	4.408	4.403		9.99	10.0	-0.0	50.0
Bromoform	Ave	1.204	1.174	0.1000	9.75	10.0	-2.5	50.0
Isopropylbenzene	Ave	5.356	5.238		9.78	10.0	-2.2	50.0
Cyclohexanone	Lin1		0.0277		401	400	0.2	50.0
1,1,2,2-Tetrachloroethane	Ave	1.115	0.9888	0.3000	8.87	10.0	-11.3	50.0
Bromobenzene	Ave	1.235	1.189		9.62	10.0	-3.8	50.0
1,2,3-Trichloropropene	Ave	0.2607	0.2363		9.07	10.0	-9.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.2483		8.49	10.0	-15.1	50.0
N-Propylbenzene	Ave	1.311	1.251		9.54	10.0	-4.6	50.0
2-Chlorotoluene	Ave	1.016	0.995		9.80	10.0	-2.0	50.0
1,3,5-Trimethylbenzene	Ave	4.052	3.910		9.65	10.0	-3.5	50.0
4-Chlorotoluene	Ave	1.313	1.245		9.48	10.0	-5.2	50.0
tert-Butylbenzene	Ave	4.395	4.203		9.56	10.0	-4.4	50.0
1,2,4-Trimethylbenzene	Ave	3.849	3.737		9.71	10.0	-2.9	50.0
sec-Butylbenzene	Ave	1.160	1.097		9.46	10.0	-5.4	50.0
1,3-Dichlorobenzene	Ave	1.876	1.837		9.79	10.0	-2.1	50.0
p-Isopropyltoluene	Ave	4.989	4.885		9.79	10.0	-2.1	50.0
1,4-Dichlorobenzene	Ave	2.898	2.667		9.20	10.0	-8.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Lab Sample ID: CCVC 280-279458/33 Calibration Date: 05/29/2015 06:10

Instrument ID: VMS_H Calib Start Date: 05/28/2015 00:18

GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 05/28/2015 05:10

Lab File ID: H3027.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	5.241	5.053		9.64	10.0	-3.6	50.0
1,2-Dichlorobenzene	Ave	1.969	1.880		9.54	10.0	-4.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1839	0.1700		9.25	10.0	-7.5	50.0
1,2,3-Trichlorobenzene	Ave	1.042	1.253		9.47	10.0	-5.3	50.0
Hexachlorobutadiene	Ave	1.379	1.318		9.55	10.0	-4.5	50.0
Naphthalene	Ave	1.505	1.389		9.23	10.0	-7.7	50.0
1,2,4-Trichlorobenzene	Ave	1.323	1.002		9.62	10.0	-3.8	50.0
Dibromofluoromethane (Surr)	Ave	0.6313	0.6065		8.17	8.50	-3.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3497	0.3458		8.40	8.50	-1.1	50.0
Toluene-d8 (Surr)	Ave	6.098	6.419		8.95	8.50	5.3	50.0
4-Bromofluorobenzene (Surr)	Ave	2.139	2.000		7.95	8.50	-6.5	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3027.D
 Lims ID: CCVC
 Client ID:
 Sample Type: CCVC
 Inject. Date: 29-May-2015 06:10:30 ALS Bottle#: 30 Worklist Smp#: 33
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: CCVC
 Operator ID: bergerb Instrument ID: VMS_H
 Sublist: chrom-AQ_VMSH_8260*sub70
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:20:53 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:20:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.970	3.970	0.000	98	198740	250.0	250.0	
* 2 Fluorobenzene	96	6.755	6.755	0.000	97	1165022	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.090	11.090	0.000	93	253431	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.102	14.102	0.000	97	425494	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.920	5.920	0.000	93	480458	8.50	8.17	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.337	6.337	0.000	83	273964	8.50	8.40	
\$ 10 Toluene-d8 (Surr)	98	8.862	8.862	0.000	95	1106242	8.50	8.95	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.744	12.744	0.000	80	578793	8.50	7.95	
28 Dichlorodifluoromethane	85	2.159	2.159	0.000	98	533071	10.0	9.50	
30 Chloromethane	50	2.246	2.246	0.000	98	368948	10.0	10.2	
31 Butadiene	54	2.368	2.368	0.000	0	277138	NC	NC	
32 Vinyl chloride	62	2.385	2.385	0.000	98	354743	10.0	10.0	
35 Bromomethane	94	2.681	2.681	0.000	90	297903	10.0	10.1	
36 Chloroethane	64	2.751	2.751	0.000	100	220568	10.0	10.2	
37 Dichlorofluoromethane	67	2.925	2.925	0.000	99	822992	10.0	10.5	
38 Trichlorofluoromethane	101	2.977	2.977	0.000	100	705941	10.0	10.1	
40 Ethyl ether	59	3.204	3.204	0.000	93	174897	10.0	9.46	
44 Acrolein	56	3.360	3.360	0.000	98	90295	100.0	70.9	
45 1,1-Dichloroethene	96	3.465	3.465	0.000	94	348685	10.0	10.0	
46 1,1,2-Trichloro-1,2,2-trif	151	3.482	3.482	0.000	97	468641	10.0	9.88	
47 Acetone	43	3.500	3.500	0.000	37	131609	40.0	36.3	
48 Iodomethane	142	3.639	3.639	0.000	99	755327	10.0	9.65	
50 Carbon disulfide	76	3.709	3.709	0.000	100	1297636	10.0	9.67	
53 Methyl acetate	43	3.813	3.813	0.000	70	560659	50.0	47.8	
52 3-Chloro-1-propene	41	3.813	3.813	0.000	88	788404	10.0	9.76	
54 Methylene Chloride	84	3.935	3.935	0.000	98	311130	10.0	10.1	
55 2-Methyl-2-propanol	59	4.057	4.057	0.000	93	102160	100.0	106.0	
57 Acrylonitrile	53	4.196	4.196	0.000	98	288784	100.0	95.1	
56 Methyl tert-butyl ether	73	4.231	4.231	0.000	98	623924	10.0	9.41	
58 trans-1,2-Dichloroethene	96	4.231	4.231	0.000	94	378096	10.0	9.66	
59 Hexane	57	4.492	4.492	0.000	95	713021	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
60 1,1-Dichloroethane	63	4.684	4.684	0.000	96	798779	10.0	9.67	
61 Vinyl acetate	43	4.701	4.701	0.000	96	858129	20.0	16.8	
67 2-Butanone (MEK)	43	5.345	5.345	0.000	52	271853	40.0	40.7	
65 cis-1,2-Dichloroethene	96	5.363	5.363	0.000	88	386845	10.0	9.81	
66 2,2-Dichloropropane	77	5.363	5.363	0.000	92	654285	10.0	8.83	
71 sec-Butyl Alcohol	45	5.571	5.571	0.000	96	395184	300.0	277.7	
73 Chlorobromomethane	128	5.641	5.641	0.000	89	166589	10.0	9.62	
74 Tetrahydrofuran	42	5.711	5.711	0.000	41	87972	20.0	18.3	
75 Chloroform	83	5.711	5.711	0.000	95	742791	10.0	9.62	
76 1,1,1-Trichloroethane	97	5.972	5.972	0.000	97	732059	10.0	9.93	
77 Cyclohexane	56	6.042	6.042	0.000	93	814102	10.0	10.0	
78 1,1-Dichloropropene	75	6.146	6.146	0.000	91	631147	10.0	9.55	
79 Carbon tetrachloride	117	6.181	6.181	0.000	99	675397	10.0	9.86	
80 Isobutyl alcohol	41	6.285	6.285	0.000	93	133017	250.0	266.9	
81 Benzene	78	6.407	6.407	0.000	98	1228989	10.0	10.1	
82 1,2-Dichloroethane	62	6.425	6.425	0.000	96	352535	10.0	9.56	
84 n-Heptane	43	6.703	6.703	0.000	97	1094889	10.0	10.1	
86 Trichloroethene	95	7.225	7.225	0.000	96	513995	10.0	10.4	
88 2-Pentanone	43	7.452	7.452	0.000	96	684087	40.0	36.9	
89 Methylcyclohexane	55	7.486	7.486	0.000	91	739998	10.0	10.2	
90 1,2-Dichloropropane	63	7.521	7.521	0.000	96	476426	10.0	9.77	
92 Dibromomethane	93	7.678	7.678	0.000	92	226176	10.0	9.31	
93 1,4-Dioxane	88	7.695	7.695	0.000	30	25531	200.0	186.5	
94 Dichlorobromomethane	83	7.887	7.887	0.000	98	695390	10.0	9.80	
96 2-Chloroethyl vinyl ether	63	8.287	8.287	0.000	87	72256	10.0	8.29	
97 cis-1,3-Dichloropropene	75	8.479	8.479	0.000	90	584865	10.0	9.80	
98 4-Methyl-2-pentanone (MIBK)	43	8.705	8.705	0.000	96	1016898	40.0	41.0	
99 Toluene	91	8.966	8.966	0.000	97	1374548	10.0	9.83	
100 trans-1,3-Dichloropropene	75	9.280	9.280	0.000	99	420129	10.0	9.40	
101 Ethyl methacrylate	69	9.402	9.402	0.000	97	353057	10.0	9.63	
102 1,1,2-Trichloroethane	97	9.541	9.541	0.000	94	256641	10.0	9.15	
103 Tetrachloroethene	164	9.750	9.750	0.000	95	419419	10.0	10.2	
104 1,3-Dichloropropane	76	9.785	9.785	0.000	97	437141	10.0	9.41	
105 2-Hexanone	43	9.906	9.906	0.000	98	641517	40.0	38.2	
108 Chlorodibromomethane	129	10.133	10.133	0.000	90	447664	10.0	9.90	
109 Ethylene Dibromide	107	10.324	10.324	0.000	98	314188	10.0	9.85	
110 1-Chlorohexane	91	11.108	11.108	0.000	91	676691	10.0	9.71	
111 Chlorobenzene	112	11.143	11.143	0.000	89	891436	10.0	9.81	
112 1,1,2-Tetrachloroethane	131	11.282	11.282	0.000	94	430814	10.0	9.82	
113 Ethylbenzene	106	11.317	11.317	0.000	99	458264	10.0	9.89	
114 m-Xylene & p-Xylene	106	11.491	11.491	0.000	98	642713	10.0	10.2	
115 o-Xylene	106	12.065	12.065	0.000	94	556668	10.0	10.1	
116 Styrene	104	12.083	12.083	0.000	85	892785	10.0	10.0	
117 Bromoform	173	12.344	12.344	0.000	94	238012	10.0	9.75	
118 Isopropylbenzene	105	12.553	12.553	0.000	97	1783139	10.0	9.78	
120 Cyclohexanone	55	12.675	12.675	0.000	95	224905	400.0	401.0	
122 Bromobenzene	156	12.936	12.936	0.000	94	404582	10.0	9.62	
121 1,1,2,2-Tetrachloroethane	83	12.936	12.936	0.000	92	336587	10.0	8.87	
123 1,2,3-Trichloropropane	110	12.988	12.988	0.000	80	80441	10.0	9.07	
124 trans-1,4-Dichloro-2-butene	53	13.005	13.005	0.000	67	84531	10.0	8.49	
125 N-Propylbenzene	120	13.075	13.075	0.000	99	425714	10.0	9.54	
126 2-Chlorotoluene	126	13.179	13.179	0.000	97	338837	10.0	9.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.284	13.284	0.000	94	1330864	10.0	9.65	
128 4-Chlorotoluene	126	13.301	13.301	0.000	98	423725	10.0	9.48	
129 tert-Butylbenzene	119	13.667	13.667	0.000	94	1430817	10.0	9.56	
130 1,2,4-Trimethylbenzene	105	13.719	13.719	0.000	96	1271892	10.0	9.71	
131 sec-Butylbenzene	134	13.911	13.911	0.000	95	373548	10.0	9.46	
132 1,3-Dichlorobenzene	146	14.032	14.032	0.000	97	625296	10.0	9.79	
133 4-Isopropyltoluene	119	14.067	14.067	0.000	98	1662914	10.0	9.79	
134 1,4-Dichlorobenzene	146	14.137	14.137	0.000	93	907990	10.0	9.20	
137 n-Butylbenzene	91	14.503	14.503	0.000	98	1720110	10.0	9.64	
138 1,2-Dichlorobenzene	146	14.520	14.520	0.000	96	639772	10.0	9.54	
139 1,2-Dibromo-3-Chloropropan	157	15.303	15.303	0.000	78	57879	10.0	9.25	
144 1,2,3-Trichlorobenzene	180	16.069	16.069	0.000	93	426564	10.0	9.47	
142 Hexachlorobutadiene	225	16.226	16.226	0.000	97	448485	10.0	9.55	
143 Naphthalene	128	16.296	16.296	0.000	98	472837	10.0	9.23	
141 1,2,4-Trichlorobenzene	180	16.522	16.522	0.000	94	341128	10.0	9.62	
S 151 1,2-Dichloroethene, Total	96				0		20.0	19.5	
S 149 1,2-Dichloroethene, Total	1				0		20.0	19.5	
S 150 Xylenes, Total	106				0		20.0	20.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.2	
S 145 Trihalomethanes, Total	1				0		40.0	39.1	
S 146 Xylenes, Total (URS)	1				0		20.0	20.3	
S 147 Total BTEX	1				0			50.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

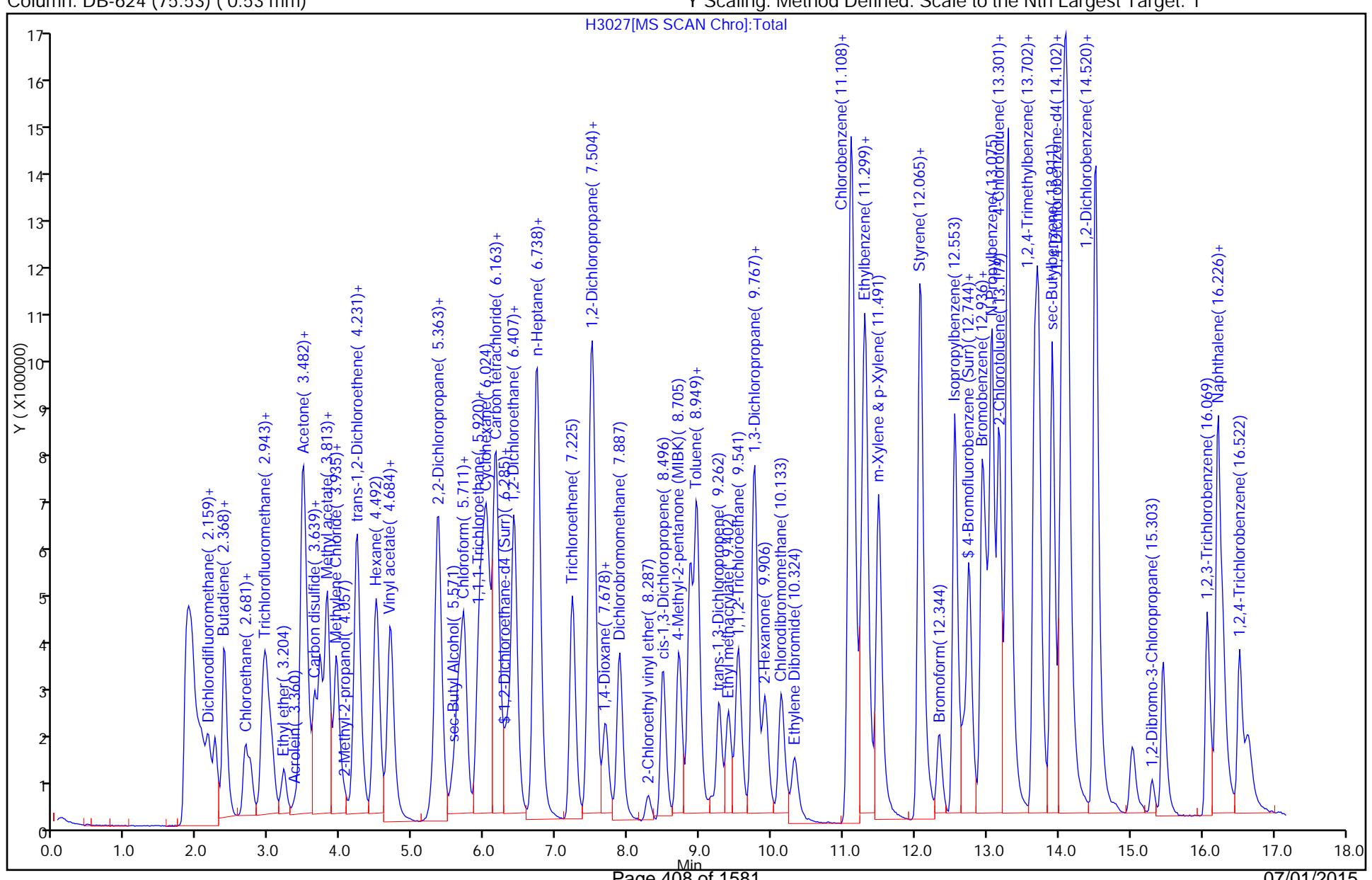
Reagents:

MV-Main A_00022	Amount Added: 5.00	Units: uL	
MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added: 5.00	Units: uL	
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3027.D
 Injection Date: 29-May-2015 06:10:30
 Lims ID: CCVC
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

TestAmerica Denver
 Instrument ID: VMS_H
 Operator ID: bergerb
 Worklist Smp#: 33
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 ALS Bottle#: 30

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
 SDG No.: _____
 Lab Sample ID: ICV 280-277770/23 Calibration Date: 05/16/2015 16:48
 Instrument ID: VMS_P Calib Start Date: 05/16/2015 14:32
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 05/16/2015 16:09
 Lab File ID: P4188.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropyl ether	Ave	0.1848	0.1734		0.00938	0.0100	-6.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2704	0.2597		0.00961	0.0100	-3.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2597	0.2527		0.00973	0.0100	-2.7	20.0
Toluene-d8 (Surr)	Ave	5.156	5.092		0.00987	0.0100	-1.3	20.0
4-Bromofluorobenzene (Surr)	Ave	1.178	1.142		0.00970	0.0100	-3.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4188.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 16-May-2015 16:48:30 ALS Bottle#: 27 Worklist Smp#: 23
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: icv
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Sublist:
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:51:01 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: seifertj

Date:

18-May-2015 10:59:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.794	0.000	95	176601	250.0	250.0	
* 1 Fluorobenzene	96	7.774	7.767	0.007	98	1728667	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.020	0.006	89	366688	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.872	-0.001	97	498468	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.231	7.224	0.007	93	359148	10.0	9.61	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	99	349501	10.0	9.73	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.940	0.000	95	1493596	10.0	9.87	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.899	10.892	0.007	87	455590	10.0	9.70	
28 Ethylene oxide	43	4.727	4.725	0.002	100	1298367	2000.0	1880.6	
33 Ethanol	45	5.132	5.130	0.002	98	86580	500.0	508.4	
38 Propene oxide	58	5.369	5.367	0.002	96	1512997	500.0	415.6	
42 Isopropyl alcohol	45	5.543	5.544	-0.001	96	66203	100.0	82.4	
46 Acetonitrile	41	5.786	5.780	0.006	68	177996	100.0	102.9	M
56 Isopropyl ether	87	6.387	6.387	0.000	94	239801	10.0	9.38	
58 2-Chloro-1,3-butadiene	53	6.516	6.516	0.000	94	709153	10.0	9.13	
59 Tert-butyl ethyl ether	59	6.666	6.666	0.000	96	752144	10.0	9.24	
60 Ethyl acetate	43	6.823	6.824	-0.001	99	107057	20.0	9.64	
65 Propionitrile	54	6.916	6.917	-0.001	99	153720	100.0	90.3	
66 Methacrylonitrile	41	7.031	7.031	0.000	96	959119	100.0	95.1	
75 Tert-amyl methyl ether	73	7.574	7.574	0.000	93	546034	10.0	9.57	
78 n-Butanol	56	7.803	7.796	0.007	30	92415	250.0	238.5	
81 Methyl methacrylate	100	8.189	8.182	0.007	94	54811	20.0	16.9	
88 2-Nitropropane	41	8.561	8.561	0.000	96	46494	20.0	17.5	
99 Tetrahydrothiophene	60	9.633	9.634	-0.001	94	58315	10.0	6.08	
110 cis-1,4-Dichloro-2-butene	53	10.770	10.770	0.000	97	40133	10.0	8.89	
125 1,2,3-Trimethylbenzene	105	11.893	11.893	0.000	98	1229764	10.0	8.98	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	96	501055	10.0	8.53	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-Supp B_00005	Amount Added: 5.00	Units: uL
MV-ARCH SS A_00035	Amount Added: 0.80	Units: uL

Report Date: 18-May-2015 11:51:02

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

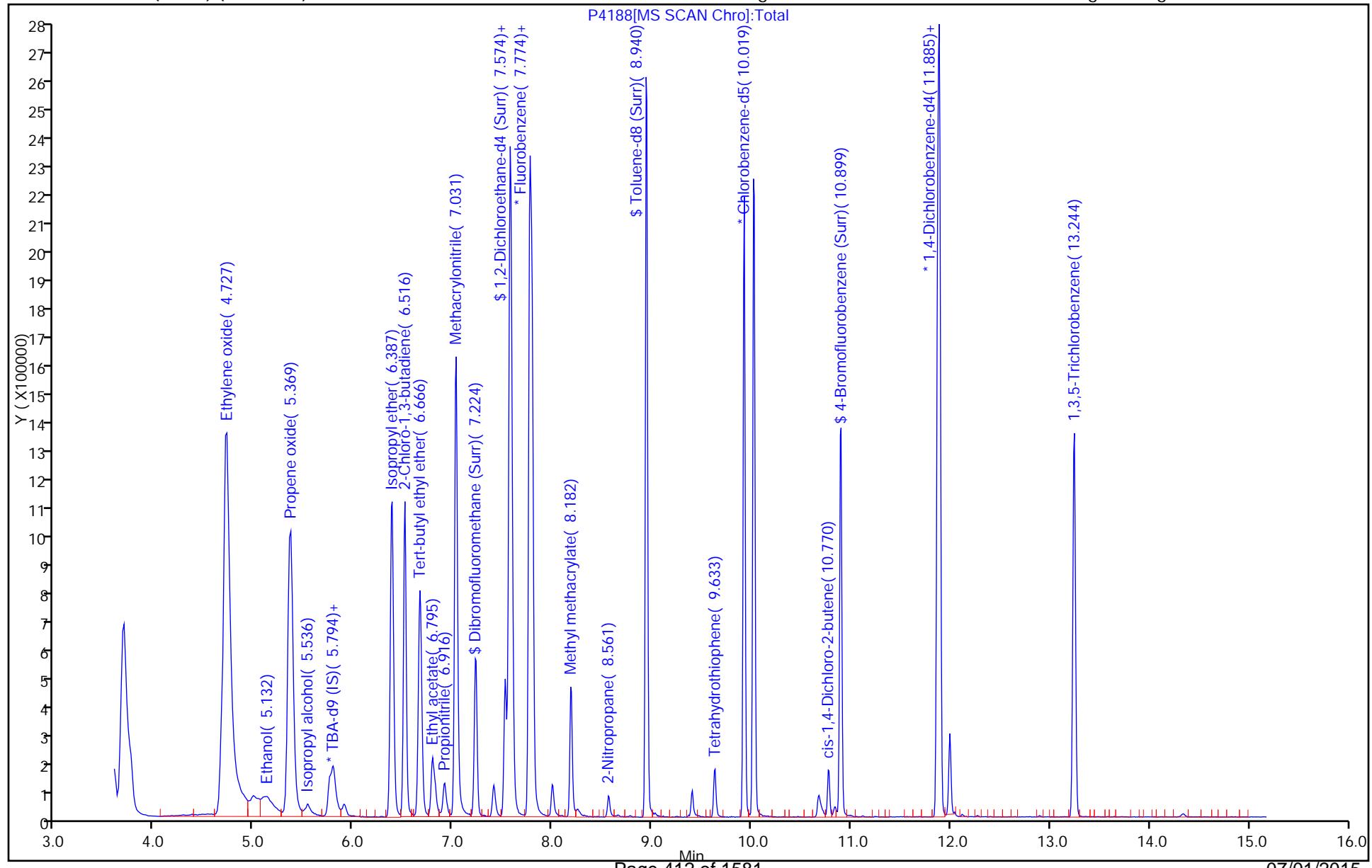
Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4188.D
 Injection Date: 16-May-2015 16:48:30
 Lims ID: icv
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: CONTRERASE
Worklist Smp#: 23Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 27

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: ICV 280-279915/19

Calibration Date: 06/02/2015 14:33

Instrument ID: VMS_P

Calib Start Date: 06/02/2015 12:15

GC Column: DB-624 (60.25) ID: 0.25 (mm)

Calib End Date: 06/02/2015 14:13

Lab File ID: P4788.D

Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1-Dichloroethene	Ave	0.3714	0.3573		0.00962	0.0100	-3.8	20.0
Carbon disulfide	Ave	1.452	1.379		0.00950	0.0100	-5.0	20.0
Methylene Chloride	Lin2		0.3197		0.00942	0.0100	-5.8	20.0
Methyl tert-butyl ether	Ave	0.4996	0.5050		0.0101	0.0100	1.1	20.0
trans-1,2-Dichloroethene	Ave	0.3786	0.3739		0.00988	0.0100	-1.2	20.0
1,1-Dichloroethane	Ave	0.7088	0.6911		0.00975	0.0100	-2.5	20.0
cis-1,2-Dichloroethene	Ave	0.3587	0.3611		0.0101	0.0100	0.7	20.0
2,2-Dichloropropane	Ave	0.4957	0.4831		0.00975	0.0100	-2.5	20.0
Bromochloromethane	Ave	0.1237	0.1201		0.00971	0.0100	-2.9	20.0
Chloroform	Ave	0.6003	0.5825		0.00970	0.0100	-3.0	20.0
1,1,1-Trichloroethane	Ave	0.5592	0.5460		0.00977	0.0100	-2.3	20.0
1,1-Dichloropropene	Ave	0.5353	0.5687		0.0106	0.0100	6.2	20.0
Carbon tetrachloride	Ave	0.4982	0.5004		0.0100	0.0100	0.4	20.0
1,2-Dichloroethane	Ave	0.3460	0.3344		0.00966	0.0100	-3.4	20.0
Benzene	Ave	1.452	1.421		0.00978	0.0100	-2.2	20.0
Trichloroethene	Ave	0.3811	0.3764		0.00988	0.0100	-1.2	20.0
1,2-Dichloropropane	Ave	0.3468	0.3307		0.00954	0.0100	-4.6	20.0
Dibromomethane	Ave	0.1159	0.1141		0.00985	0.0100	-1.5	20.0
Bromodichloromethane	Ave	0.3690	0.3545		0.00961	0.0100	-3.9	20.0
cis-1,3-Dichloropropene	Lin1		1.788		0.00990	0.0100	-1.0	20.0
Toluene	Ave	1.498	1.498		0.0100	0.0100	0.0	20.0
trans-1,3-Dichloropropene	Lin1		0.3147		0.0105	0.0100	5.0	20.0
1,1,2-Trichloroethane	Ave	0.1604	0.1579		0.00985	0.0100	-1.5	20.0
1,3-Dichloropropane	Ave	1.357	1.313		0.00968	0.0100	-3.2	20.0
Tetrachloroethene	Ave	1.329	1.306		0.00983	0.0100	-1.7	20.0
Dibromochloromethane	Lin1		0.8072		0.00933	0.0100	-6.7	20.0
Ethylene Dibromide	Ave	0.6095	0.6205		0.0102	0.0100	1.8	20.0
Chlorobenzene	Ave	3.868	3.758		0.00972	0.0100	-2.8	20.0
Ethylbenzene	Ave	2.325	2.334		0.0100	0.0100	0.4	20.0
1,1,1,2-Tetrachloroethane	Ave	1.150	1.139		0.00991	0.0100	-0.9	20.0
m-Xylene & p-Xylene	Ave	2.817	2.814		0.00999	0.0100	-0.0	20.0
o-Xylene	Ave	2.576	2.592		0.0101	0.0100	0.6	20.0
Styrene	Lin1		3.774		0.0100	0.0100	-0.0	20.0
Bromoform	Lin1		0.3499		0.00875	0.0100	-12.5	20.0
Isopropylbenzene	Ave	4.689	4.926		0.0105	0.0100	5.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4635	0.4684		0.0101	0.0100	1.0	20.0
1,2,3-Trichloropropane	Lin1		0.1305		0.0102	0.0100	2.3	20.0
N-Propylbenzene	Ave	1.337	1.403		0.0105	0.0100	4.9	20.0
Bromobenzene	Ave	0.8877	0.9188		0.0103	0.0100	3.5	20.0
1,3,5-Trimethylbenzene	Ave	3.759	3.922		0.0104	0.0100	4.3	20.0
2-Chlorotoluene	Ave	1.087	1.099		0.0101	0.0100	1.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Lab Sample ID: ICV 280-279915/19 Calibration Date: 06/02/2015 14:33

Instrument ID: VMS_P Calib Start Date: 06/02/2015 12:15

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/02/2015 14:13

Lab File ID: P4788.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chlorotoluene	Ave	1.067	1.101		0.0103	0.0100	3.2	20.0
tert-Butylbenzene	Ave	3.863	4.045		0.0105	0.0100	4.7	20.0
1,2,4-Trimethylbenzene	Ave	3.806	3.915		0.0103	0.0100	2.8	20.0
sec-Butylbenzene	Ave	1.100	1.148		0.0104	0.0100	4.3	20.0
4-Isopropyltoluene	Ave	4.331	4.559		0.0105	0.0100	5.3	20.0
1,3-Dichlorobenzene	Ave	1.940	1.941		0.0100	0.0100	0.0	20.0
1,4-Dichlorobenzene	Ave	1.934	1.913		0.00989	0.0100	-1.1	20.0
n-Butylbenzene	Ave	4.368	4.585		0.0105	0.0100	4.9	20.0
1,2-Dichlorobenzene	Ave	1.618	1.600		0.00989	0.0100	-1.1	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0607		0.00878	0.0100	-12.2	20.0
1,2,4-Trichlorobenzene	Ave	1.120	1.147		0.0102	0.0100	2.4	20.0
Hexachlorobutadiene	Ave	0.8570	0.8497		0.00991	0.0100	-0.9	20.0
Naphthalene	Ave	1.492	1.557		0.0104	0.0100	4.3	20.0
1,2,3-Trichlorobenzene	Ave	0.8862	0.9034		0.0102	0.0100	1.9	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4788.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 02-Jun-2015 14:33:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist:
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 23:42:15 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: contrerase Date: 02-Jun-2015 23:42:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.787	5.800	-0.013	96	302987	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.773	-0.006	98	2191274	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.027	10.033	-0.006	88	513420	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.872	11.878	-0.006	97	762174	12.5	12.5	
35 Ethyl ether	59	5.241	5.243	-0.002	95	318277	10.0	9.66	
39 Acrolein	56	5.409	5.411	-0.002	99	252540	100.0	122.5	
40 1,1,2-Trichloro-1,2,2-trif	151	5.493	5.495	-0.002	95	530269	10.0	9.35	
43 1,1-Dichloroethene	96	5.551	5.550	0.001	96	626278	10.0	9.62	
44 Iodomethane	142	5.730	5.729	0.001	99	949116	10.0	9.89	
45 Methyl acetate	43	5.751	5.751	0.000	98	806725	50.0	47.9	
47 3-Chloro-1-propene	41	5.801	5.801	0.000	90	1223562	10.0	9.21	
48 Carbon disulfide	76	5.808	5.844	-0.036	100	2418142	10.0	9.50	
49 2-Methyl-2-propanol	59	5.858	5.851	0.007	93	177766	100.0	99.8	
50 Methylene Chloride	84	5.901	5.908	-0.007	98	560503	10.0	9.42	
52 Acrylonitrile	53	6.066	6.065	0.001	95	739818	100.0	98.8	
51 Methyl tert-butyl ether	73	6.066	6.072	-0.006	97	885182	10.0	10.1	
53 trans-1,2-Dichloroethene	96	6.116	6.123	-0.006	95	655414	10.0	9.88	
54 Hexane	57	6.273	6.273	0.000	96	1237284	10.0	10.1	
55 Vinyl acetate	43	6.380	6.380	0.000	97	1360380	20.0	23.2	
57 1,1-Dichloroethane	63	6.445	6.444	0.001	96	1211528	10.0	9.75	
62 sec-Butyl Alcohol	45	6.881	6.880	0.001	95	428061	300.0	295.3	
63 cis-1,2-Dichloroethene	96	6.888	6.888	0.000	84	633046	10.0	10.1	
64 2,2-Dichloropropane	77	6.909	6.909	0.000	89	846874	10.0	9.75	
67 Chlorobromomethane	128	7.088	7.088	0.000	94	210556	10.0	9.71	
68 Chloroform	83	7.095	7.095	0.000	96	1021097	10.0	9.70	
69 Tetrahydrofuran	42	7.117	7.116	0.001	90	128208	20.0	19.9	
70 Isobutyl alcohol	41	7.296	7.295	0.001	93	148957	250.0	226.5	
71 1,1,1-Trichloroethane	97	7.303	7.302	0.001	97	957217	10.0	9.77	
72 Cyclohexane	56	7.367	7.374	-0.007	94	1385600	10.0	10.0	
73 1,1-Dichloropropene	75	7.410	7.410	0.000	95	996960	10.0	10.6	
74 Carbon tetrachloride	117	7.439	7.445	-0.006	97	877143	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
76 1,2-Dichloroethane	62	7.582	7.581	0.001	98	586136	10.0	9.66	
77 Benzene	78	7.596	7.595	0.001	98	2490265	10.0	9.78	
14 n-Heptane	43	7.653	7.653	0.000	96	1427494	10.0	10.3	
79 Trichloroethene	95	8.053	8.053	0.000	98	659779	10.0	9.88	
80 2-Pentanone	43	8.104	8.103	0.001	98	612566	40.0	37.5	
82 Methylcyclohexane	55	8.232	8.232	0.000	95	1106018	10.0	10.0	
83 1,2-Dichloropropane	63	8.247	8.246	0.001	92	579771	10.0	9.54	
84 1,4-Dioxane	88	8.297	8.296	0.001	98	39452	200.0	195.6	
85 Dibromomethane	93	8.354	8.346	0.008	95	200023	10.0	9.85	
86 Dichlorobromomethane	83	8.418	8.418	0.000	98	621476	10.0	9.61	
87 2-Chloroethyl vinyl ether	63	8.554	8.546	0.008	93	164548	10.0	10.1	
89 cis-1,3-Dichloropropene	75	8.726	8.725	0.001	92	734449	10.0	9.90	
91 Toluene	91	8.997	8.997	0.000	98	2626710	10.0	10.0	
92 Ethyl methacrylate	69	9.076	9.076	0.000	95	330342	10.0	9.65	
93 trans-1,3-Dichloropropene	75	9.097	9.097	0.000	99	551611	10.0	10.5	
94 1,1,2-Trichloroethane	97	9.255	9.261	-0.006	94	276841	10.0	9.85	
96 1,3-Dichloropropane	76	9.398	9.397	0.001	97	539449	10.0	9.68	
97 Tetrachloroethene	164	9.405	9.404	0.001	96	536619	10.0	9.83	
98 Chlorodibromomethane	129	9.591	9.590	0.001	91	331555	10.0	9.33	
100 Ethylene Dibromide	107	9.719	9.719	0.000	99	254866	10.0	10.2	
101 1-Chlorohexane	91	9.927	9.926	0.001	90	946134	10.0	10.4	
102 Chlorobenzene	112	10.048	10.048	0.000	94	1543564	10.0	9.72	
103 Ethylbenzene	106	10.077	10.077	0.000	98	958610	10.0	10.0	
104 1,1,1,2-Tetrachloroethane	131	10.084	10.084	0.000	95	467921	10.0	9.91	
105 m-Xylene & p-Xylene	106	10.156	10.155	0.001	99	1155871	10.0	10.0	
107 o-Xylene	106	10.477	10.477	0.000	87	1064749	10.0	10.1	
106 Styrene	104	10.477	10.477	0.000	85	1549935	10.0	10.0	
108 Bromoform	173	10.692	10.691	0.001	97	143734	10.0	8.75	
109 Isopropylbenzene	105	10.735	10.734	0.001	97	3003327	10.0	10.5	
112 1,1,2,2-Tetrachloroethane	83	10.956	10.956	0.000	95	285576	10.0	10.1	
113 trans-1,4-Dichloro-2-butene	53	10.992	10.992	0.000	85	80868	10.0	9.89	
114 1,2,3-Trichloropropane	110	11.028	11.027	0.001	88	79551	10.0	10.2	
115 N-Propylbenzene	120	11.057	11.056	0.001	98	855527	10.0	10.5	
116 Bromobenzene	156	11.071	11.070	0.001	97	560217	10.0	10.3	
117 1,3,5-Trimethylbenzene	105	11.164	11.163	0.001	94	2391388	10.0	10.4	
118 2-Chlorotoluene	126	11.185	11.185	0.000	95	670067	10.0	10.1	
119 4-Chlorotoluene	126	11.264	11.263	0.001	98	671501	10.0	10.3	
120 tert-Butylbenzene	119	11.471	11.471	0.000	92	2466221	10.0	10.5	
121 1,2,4-Trimethylbenzene	105	11.500	11.499	0.001	98	2386880	10.0	10.3	
122 sec-Butylbenzene	134	11.650	11.650	0.000	95	700002	10.0	10.4	
123 4-Isopropyltoluene	119	11.743	11.743	0.001	97	2779954	10.0	10.5	
124 1,3-Dichlorobenzene	146	11.829	11.828	0.001	97	1183606	10.0	10.0	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	93	1166541	10.0	9.89	
127 n-Butylbenzene	91	12.115	12.114	0.001	98	2795374	10.0	10.5	
128 1,2-Dichlorobenzene	146	12.265	12.264	0.001	95	975364	10.0	9.89	
129 1,2-Dibromo-3-Chloropropan	157	13.044	13.044	0.000	76	36991	10.0	8.78	
130 1,2,4-Trichlorobenzene	180	14.010	14.009	0.001	94	699086	10.0	10.2	
131 Hexachlorobutadiene	225	14.153	14.152	0.001	98	518066	10.0	9.91	
132 Naphthalene	128	14.396	14.395	0.001	97	949324	10.0	10.4	
133 1,2,3-Trichlorobenzene	180	14.725	14.724	0.001	94	550848	10.0	10.2	
S 140 1,2-Dichloroethene, Total	96				0		20.0	19.9	
S 138 1,2-Dichloroethene, Total	1				0		20.0	19.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 139 Xylenes, Total	106			0			20.0	20.1	
S 137 1,3-Dichloropropene, Total	1			0			20.0	20.4	
S 134 Trihalomethanes, Total	1			0			40.0	37.4	
S 135 Xylenes, Total (URS)	1			0			20.0	20.1	

Reagents:

MV-SS 2-Cleve_00021	Amount Added: 5.00	Units: uL
MV-Main B_00010	Amount Added: 5.00	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 23:42:16

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4788.D

Injection Date: 02-Jun-2015 14:33:30

Instrument ID: VMS_P

Lims ID: ICV

Operator ID: SEIFERTJ

Client ID:

Worklist Smp#: 19

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

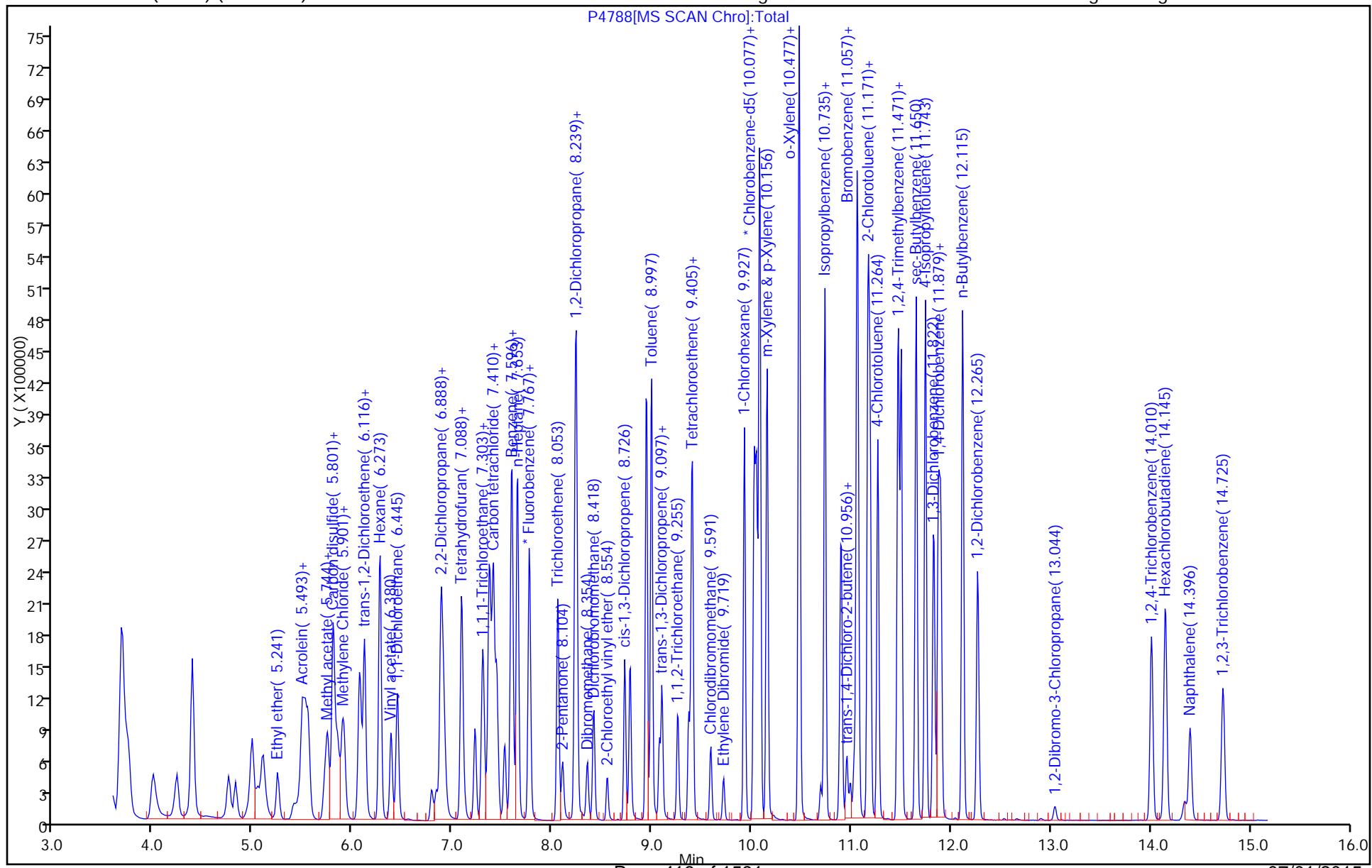
ALS Bottle#: 18

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICV 280-279915/20 Calibration Date: 06/02/2015 15:21
Instrument ID: VMS_P Calib Start Date: 06/02/2015 12:15
GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/02/2015 14:13
Lab File ID: P4789.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.5510		0.0119	0.0100	18.8	20.0
Chloromethane	Ave	0.3460	0.3545		0.0102	0.0100	2.5	20.0
Vinyl chloride	Ave	0.3271	0.3599		0.0110	0.0100	10.0	20.0
Bromomethane	Ave	0.2076	0.2168		0.0104	0.0100	4.4	20.0
Chloroethane	Ave	0.2063	0.2097		0.0102	0.0100	1.6	20.0
Trichlorofluoromethane	Ave	0.6173	0.7154		0.0116	0.0100	15.9	20.0
Acetone	Lin2		0.0455		0.0441	0.0400	10.1	20.0
2-Butanone (MEK)	Lin1		0.0614		0.0355	0.0400	-11.2	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.1390		0.0428	0.0400	7.1	20.0
2-Hexanone	Lin1		0.4028		0.0432	0.0400	8.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4789.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 02-Jun-2015 15:21:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist:
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:48 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: contrerase Date: 02-Jun-2015 21:24:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.800	5.800	0.000	94	234564	250.0	250.0	
* 1 Fluorobenzene	96	7.773	7.773	0.000	98	1898182	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.033	10.033	0.000	89	435743	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.878	11.878	0.000	97	635769	12.5	12.5	
23 Dichlorodifluoromethane	85	4.013	4.013	0.000	100	836637	10.0	11.9	
26 Chloromethane	50	4.250	4.250	0.000	100	538385	10.0	10.2	
27 Vinyl chloride	62	4.390	4.390	0.000	79	546580	10.0	11.0	
29 Bromomethane	94	4.767	4.767	0.000	92	329193	10.0	10.4	
30 Chloroethane	64	4.837	4.837	0.000	99	318454	10.0	10.2	
31 Dichlorofluoromethane	67	5.004	5.004	0.000	98	1225280	10.0	12.1	
32 Trichlorofluoromethane	101	5.102	5.102	0.000	100	1086397	10.0	11.6	
41 Acetone	43	5.528	5.528	0.000	99	276501	40.0	44.1	
61 2-Butanone (MEK)	43	6.844	6.844	0.000	99	372955	40.0	35.5	
90 4-Methyl-2-pentanone (MIBK)	43	8.782	8.782	0.000	99	844356	40.0	42.8	
95 2-Hexanone	43	9.375	9.375	0.000	99	561685	40.0	43.2	
111 Cyclohexanone	55	10.891	10.891	0.000	96	240575	400.0	396.6	

Reagents:

MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL
MV-567649-D_00001	Amount Added: 1.00	Units: uL

Report Date: 02-Jun-2015 21:55:49

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4789.D

Injection Date: 02-Jun-2015 15:21:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: ICV

Worklist Smp#: 20

Client ID:

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

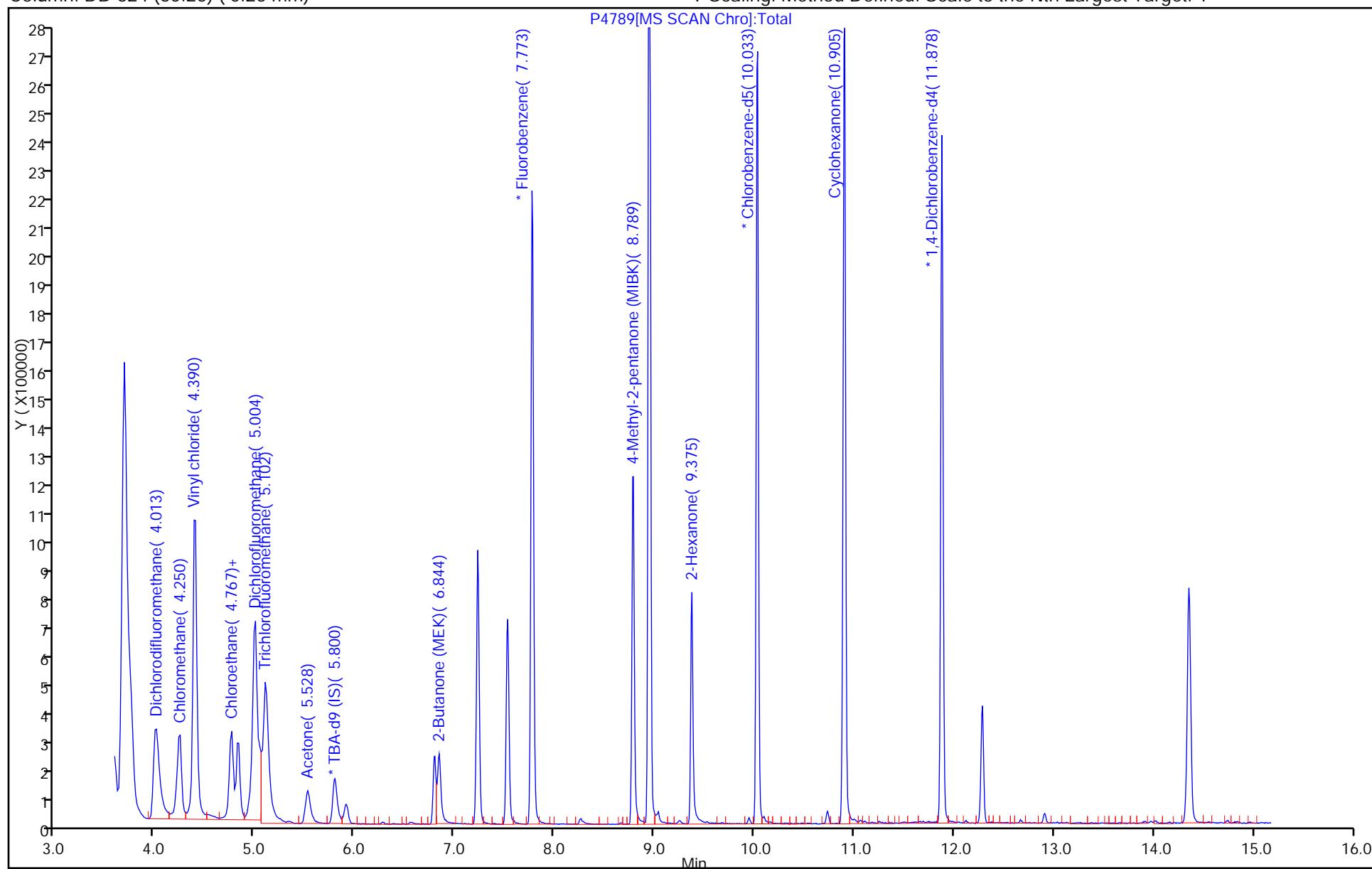
ALS Bottle#: 19

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCV 280-280068/2

Calibration Date: 06/02/2015 22:41

Instrument ID: VMS_P

Calib Start Date: 06/02/2015 12:15

GC Column: DB-624 (60.25) ID: 0.25 (mm)

Calib End Date: 06/02/2015 14:13

Lab File ID: P4810.D

Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.5276		0.0114	0.0100	13.6	20.0
Chloromethane	Ave	0.3460	0.3887		0.0112	0.0100	12.4	20.0
Vinyl chloride	Ave	0.3271	0.3887		0.0119	0.0100	18.8	20.0
Bromomethane	Ave	0.2076	0.2407		0.0116	0.0100	15.9	20.0
Chloroethane	Ave	0.2063	0.2214		0.0107	0.0100	7.3	20.0
Trichlorofluoromethane	Ave	0.6173	0.7302		0.0118	0.0100	18.3	20.0
Acetone	Lin2		0.0465		0.0450	0.0400	12.4	20.0
1,1-Dichloroethene	Ave	0.3714	0.3880		0.0104	0.0100	4.5	20.0
Carbon disulfide	Ave	1.452	1.531		0.0105	0.0100	5.4	20.0
Methylene Chloride	Lin2		0.3333		0.00984	0.0100	-1.6	20.0
Methyl tert-butyl ether	Ave	0.4996	0.4696		0.00940	0.0100	-6.0	20.0
trans-1,2-Dichloroethene	Ave	0.3786	0.3911		0.0103	0.0100	3.3	20.0
1,1-Dichloroethane	Ave	0.7088	0.7343		0.0104	0.0100	3.6	20.0
2-Butanone (MEK)	Lin1		0.0677		0.0392	0.0400	-2.1	20.0
cis-1,2-Dichloroethene	Ave	0.3587	0.3638		0.0101	0.0100	1.4	20.0
2,2-Dichloropropane	Ave	0.4957	0.5413		0.0109	0.0100	9.2	20.0
Bromochloromethane	Ave	0.1237	0.1216		0.00983	0.0100	-1.7	20.0
Chloroform	Ave	0.6003	0.6271		0.0104	0.0100	4.5	20.0
1,1,1-Trichloroethane	Ave	0.5592	0.6010		0.0107	0.0100	7.5	20.0
1,1-Dichloropropene	Ave	0.5353	0.5823		0.0109	0.0100	8.8	20.0
Carbon tetrachloride	Ave	0.4982	0.5535		0.0111	0.0100	11.1	20.0
1,2-Dichloroethane	Ave	0.3460	0.3668		0.0106	0.0100	6.0	20.0
Benzene	Ave	1.452	1.499		0.0103	0.0100	3.2	20.0
Trichloroethene	Ave	0.3811	0.3771		0.00990	0.0100	-1.0	20.0
1,2-Dichloropropane	Ave	0.3468	0.3368		0.00971	0.0100	-2.9	20.0
Dibromomethane	Ave	0.1159	0.1170		0.0101	0.0100	1.0	20.0
Bromodichloromethane	Ave	0.3690	0.3738		0.0101	0.0100	1.3	20.0
cis-1,3-Dichloropropene	Lin1		1.709		0.00947	0.0100	-5.3	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.1187		0.0366	0.0400	-8.4	20.0
Toluene	Ave	1.498	1.557		0.0104	0.0100	4.0	20.0
trans-1,3-Dichloropropene	Lin1		0.2671		0.00894	0.0100	-10.6	20.0
1,1,2-Trichloroethane	Ave	0.1604	0.1553		0.00968	0.0100	-3.2	20.0
2-Hexanone	Lin1		0.3194		0.0344	0.0400	-14.0	20.0
1,3-Dichloropropane	Ave	1.357	1.358		0.0100	0.0100	0.0	20.0
Tetrachloroethene	Ave	1.329	1.430		0.0108	0.0100	7.6	20.0
Dibromochloromethane	Lin1		0.7723		0.00893	0.0100	-10.7	20.0
Ethylene Dibromide	Ave	0.6095	0.6111		0.0100	0.0100	0.3	20.0
Chlorobenzene	Ave	3.868	3.974		0.0103	0.0100	2.7	20.0
Ethylbenzene	Ave	2.325	2.493		0.0107	0.0100	7.2	20.0
1,1,1,2-Tetrachloroethane	Ave	1.150	1.187		0.0103	0.0100	3.2	20.0
m-Xylene & p-Xylene	Ave	2.817	2.929		0.0104	0.0100	4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: CCV 280-280068/2 Calibration Date: 06/02/2015 22:41
Instrument ID: VMS_P Calib Start Date: 06/02/2015 12:15
GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/02/2015 14:13
Lab File ID: P4810.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
o-Xylene	Ave	2.576	2.753		0.0107	0.0100	6.8	20.0
Styrene	Lin1		4.001		0.0106	0.0100	6.0	20.0
Bromoform	Lin1		0.3324		0.00832	0.0100	-16.8	20.0
Isopropylbenzene	Ave	4.689	4.897		0.0104	0.0100	4.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4635	0.4324		0.00933	0.0100	-6.7	20.0
1,2,3-Trichloropropane	Lin1		0.1232		0.00966	0.0100	-3.4	20.0
N-Propylbenzene	Ave	1.337	1.404		0.0105	0.0100	5.0	20.0
Bromobenzene	Ave	0.8877	0.9012		0.0102	0.0100	1.5	20.0
1,3,5-Trimethylbenzene	Ave	3.759	4.018		0.0107	0.0100	6.9	20.0
2-Chlorotoluene	Ave	1.087	1.104		0.0102	0.0100	1.6	20.0
4-Chlorotoluene	Ave	1.067	1.082		0.0101	0.0100	1.4	20.0
tert-Butylbenzene	Ave	3.863	4.117		0.0107	0.0100	6.6	20.0
1,2,4-Trimethylbenzene	Ave	3.806	4.071		0.0107	0.0100	7.0	20.0
sec-Butylbenzene	Ave	1.100	1.170		0.0106	0.0100	6.3	20.0
4-Isopropyltoluene	Ave	4.331	4.679		0.0108	0.0100	8.0	20.0
1,3-Dichlorobenzene	Ave	1.940	1.953		0.0101	0.0100	0.7	20.0
1,4-Dichlorobenzene	Ave	1.934	1.903		0.00984	0.0100	-1.6	20.0
n-Butylbenzene	Ave	4.368	4.826		0.0110	0.0100	10.5	20.0
1,2-Dichlorobenzene	Ave	1.618	1.599		0.00988	0.0100	-1.2	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0526		0.00767	0.0100	-23.3*	20.0
1,2,4-Trichlorobenzene	Ave	1.120	1.118		0.00998	0.0100	-0.2	20.0
Hexachlorobutadiene	Ave	0.8570	0.9080		0.0106	0.0100	5.9	20.0
Naphthalene	Ave	1.492	1.477		0.00990	0.0100	-1.0	20.0
1,2,3-Trichlorobenzene	Ave	0.8862	0.8685		0.00980	0.0100	-2.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4810.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Jun-2015 22:41:30 ALS Bottle#: 10 Worklist Smp#: 2
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ccv
 Operator ID: contrerase Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub70
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:35:56 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: contrerase Date: 02-Jun-2015 23:33:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.794	0.000	39	169417	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.767	0.000	97	1394296	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.027	10.027	0.000	89	316055	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.872	11.872	0.000	97	511551	12.5	12.5	
23 Dichlorodifluoromethane	85	4.001	4.001	0.000	100	588494	10.0	11.4	
26 Chloromethane	50	4.239	4.239	0.000	99	433605	10.0	11.2	
27 Vinyl chloride	62	4.378	4.378	0.000	85	433524	10.0	11.9	
29 Bromomethane	94	4.756	4.756	0.000	93	268428	10.0	11.6	
30 Chloroethane	64	4.825	4.825	0.000	98	246910	10.0	10.7	
31 Dichlorofluoromethane	67	4.993	4.993	0.000	98	817611	10.0	11.0	
32 Trichlorofluoromethane	101	5.091	5.091	0.000	100	814434	10.0	11.8	
35 Ethyl ether	59	5.244	5.244	0.000	94	196010	10.0	9.35	
39 Acrolein	56	5.412	5.412	0.000	99	126098	100.0	96.2	
40 1,1,2-Trichloro-1,2,2-trif	151	5.496	5.496	0.000	96	400443	10.0	11.1	
41 Acetone	43	5.522	5.522	0.000	97	207252	40.0	45.0	
43 1,1-Dichloroethene	96	5.551	5.551	0.000	96	432827	10.0	10.4	
44 Iodomethane	142	5.730	5.730	0.000	99	606023	10.0	9.93	
45 Methyl acetate	43	5.751	5.751	0.000	99	521043	50.0	48.6	
47 3-Chloro-1-propene	41	5.801	5.801	0.000	90	877751	10.0	10.4	
48 Carbon disulfide	76	5.844	5.844	0.000	100	1707828	10.0	10.5	M
49 2-Methyl-2-propanol	59	5.858	5.858	0.000	33	101171	100.0	101.6	
50 Methylene Chloride	84	5.908	5.908	0.000	98	371792	10.0	9.84	
52 Acrylonitrile	53	6.066	6.066	0.000	94	459033	100.0	96.4	
51 Methyl tert-butyl ether	73	6.066	6.066	0.000	96	523771	10.0	9.40	
53 trans-1,2-Dichloroethene	96	6.116	6.116	0.000	94	436247	10.0	10.3	
54 Hexane	57	6.273	6.273	0.000	96	805446	10.0	10.7	
55 Vinyl acetate	43	6.380	6.380	0.000	97	686264	20.0	18.4	
57 1,1-Dichloroethane	63	6.445	6.445	0.000	97	819103	10.0	10.4	
61 2-Butanone (MEK)	43	6.838	6.838	0.000	99	301985	40.0	39.2	
62 sec-Butyl Alcohol	45	6.881	6.881	0.000	83	214603	300.0	266.3	
63 cis-1,2-Dichloroethene	96	6.881	6.881	0.000	87	405750	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.909	6.909	0.000	89	603726	10.0	10.9	
67 Chlorobromomethane	128	7.088	7.088	0.000	91	135633	10.0	9.83	
68 Chloroform	83	7.095	7.095	0.000	96	699478	10.0	10.4	
69 Tetrahydrofuran	42	7.117	7.117	0.000	90	68963	20.0	16.8	
70 Isobutyl alcohol	41	7.303	7.303	0.000	88	87559	250.0	238.1	
71 1,1,1-Trichloroethane	97	7.303	7.303	0.000	97	670359	10.0	10.7	
72 Cyclohexane	56	7.374	7.374	0.000	95	950418	10.0	10.8	
73 1,1-Dichloropropene	75	7.410	7.410	0.000	95	649566	10.0	10.9	
74 Carbon tetrachloride	117	7.446	7.446	0.000	95	617436	10.0	11.1	
76 1,2-Dichloroethane	62	7.581	7.581	0.000	98	409156	10.0	10.6	
77 Benzene	78	7.596	7.596	0.000	98	1671550	10.0	10.3	
14 n-Heptane	43	7.653	7.653	0.000	96	948678	10.0	10.8	
79 Trichloroethene	95	8.053	8.053	0.000	96	420603	10.0	9.90	
80 2-Pentanone	43	8.103	8.103	0.000	98	358192	40.0	34.6	
82 Methylcyclohexane	55	8.232	8.232	0.000	95	760744	10.0	10.8	
83 1,2-Dichloropropane	63	8.246	8.246	0.000	90	375652	10.0	9.71	
84 1,4-Dioxane	88	8.304	8.304	0.000	95	22274	200.0	174.8	
85 Dibromomethane	93	8.347	8.347	0.000	93	130530	10.0	10.1	
86 Dichlorobromomethane	83	8.418	8.418	0.000	98	416962	10.0	10.1	
87 2-Chloroethyl vinyl ether	63	8.554	8.554	0.000	94	75427	10.0	7.34	
89 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	90	432108	10.0	9.47	
90 4-Methyl-2-pentanone (MIBK)	43	8.783	8.783	0.000	99	529638	40.0	36.6	
91 Toluene	91	8.997	8.997	0.000	97	1736958	10.0	10.4	
92 Ethyl methacrylate	69	9.076	9.076	0.000	95	170175	10.0	8.11	
93 trans-1,3-Dichloropropene	75	9.097	9.097	0.000	97	297978	10.0	8.94	
94 1,1,2-Trichloroethane	97	9.262	9.262	0.000	96	173202	10.0	9.68	
95 2-Hexanone	43	9.369	9.369	0.000	98	323060	40.0	34.4	
96 1,3-Dichloropropane	76	9.398	9.398	0.000	97	343431	10.0	10.0	
97 Tetrachloroethene	164	9.405	9.405	0.000	93	361575	10.0	10.8	
98 Chlorodibromomethane	129	9.591	9.591	0.000	91	195275	10.0	8.93	
100 Ethylene Dibromide	107	9.719	9.719	0.000	97	154524	10.0	10.0	
101 1-Chlorohexane	91	9.927	9.927	0.000	87	574926	10.0	10.3	
102 Chlorobenzene	112	10.048	10.048	0.000	93	1004676	10.0	10.3	
103 Ethylbenzene	106	10.077	10.077	0.000	97	630240	10.0	10.7	
104 1,1,2-Tetrachloroethane	131	10.084	10.084	0.000	94	300152	10.0	10.3	
105 m-Xylene & p-Xylene	106	10.156	10.156	0.000	99	740656	10.0	10.4	
107 o-Xylene	106	10.477	10.477	0.000	87	695963	10.0	10.7	
106 Styrene	104	10.477	10.477	0.000	84	1011625	10.0	10.6	
108 Bromoform	173	10.692	10.692	0.000	94	84048	10.0	8.32	
109 Isopropylbenzene	105	10.735	10.735	0.000	97	2004190	10.0	10.4	
111 Cyclohexanone	55	10.885	10.885	0.000	96	149748	400.0	341.2	
112 1,1,2,2-Tetrachloroethane	83	10.956	10.956	0.000	96	176943	10.0	9.33	
113 trans-1,4-Dichloro-2-butene	53	10.992	10.992	0.000	82	46891	10.0	8.56	
114 1,2,3-Trichloropropane	110	11.028	11.028	0.000	87	50424	10.0	9.66	
115 N-Propylbenzene	120	11.056	11.056	0.000	98	574640	10.0	10.5	
116 Bromobenzene	156	11.071	11.071	0.000	98	368790	10.0	10.2	
117 1,3,5-Trimethylbenzene	105	11.164	11.164	0.000	94	1644321	10.0	10.7	
118 2-Chlorotoluene	126	11.185	11.185	0.000	95	451626	10.0	10.2	
119 4-Chlorotoluene	126	11.264	11.264	0.000	99	442632	10.0	10.1	
120 tert-Butylbenzene	119	11.471	11.471	0.000	92	1684898	10.0	10.7	
121 1,2,4-Trimethylbenzene	105	11.500	11.500	0.000	99	1665937	10.0	10.7	
122 sec-Butylbenzene	134	11.650	11.650	0.000	95	478644	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.743	11.743	0.000	97	1914801	10.0	10.8	
124 1,3-Dichlorobenzene	146	11.829	11.829	0.000	96	799082	10.0	10.1	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	92	778778	10.0	9.84	
127 n-Butylbenzene	91	12.115	12.115	0.000	98	1975076	10.0	11.0	
128 1,2-Dichlorobenzene	146	12.265	12.265	0.000	94	654185	10.0	9.88	
129 1,2-Dibromo-3-Chloropropan	157	13.044	13.044	0.000	70	21541	10.0	7.67	
130 1,2,4-Trichlorobenzene	180	14.009	14.009	0.000	93	457326	10.0	9.98	
131 Hexachlorobutadiene	225	14.152	14.152	0.000	97	371579	10.0	10.6	
132 Naphthalene	128	14.396	14.396	0.000	97	604585	10.0	9.90	
133 1,2,3-Trichlorobenzene	180	14.732	14.732	0.000	94	355417	10.0	9.80	
S 140 1,2-Dichloroethene, Total	96				0		20.0	20.5	
S 138 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 139 Xylenes, Total	106				0		20.0	21.1	
S 137 1,3-Dichloropropene, Total	1				0		20.0	18.4	
S 134 Trihalomethanes, Total	1				0		40.0	37.8	
S 135 Xylenes, Total (URS)	1				0		20.0	21.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 5.00	Units: uL
MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL
MV-2cleve+AVA_00010	Amount Added: 5.00	Units: uL

Report Date: 03-Jun-2015 10:35:56

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4810.D

Injection Date: 02-Jun-2015 22:41:30

Instrument ID: VMS_P

Lims ID: CCV

Operator ID: contrerase

Client ID:

Worklist Smp#: 2

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

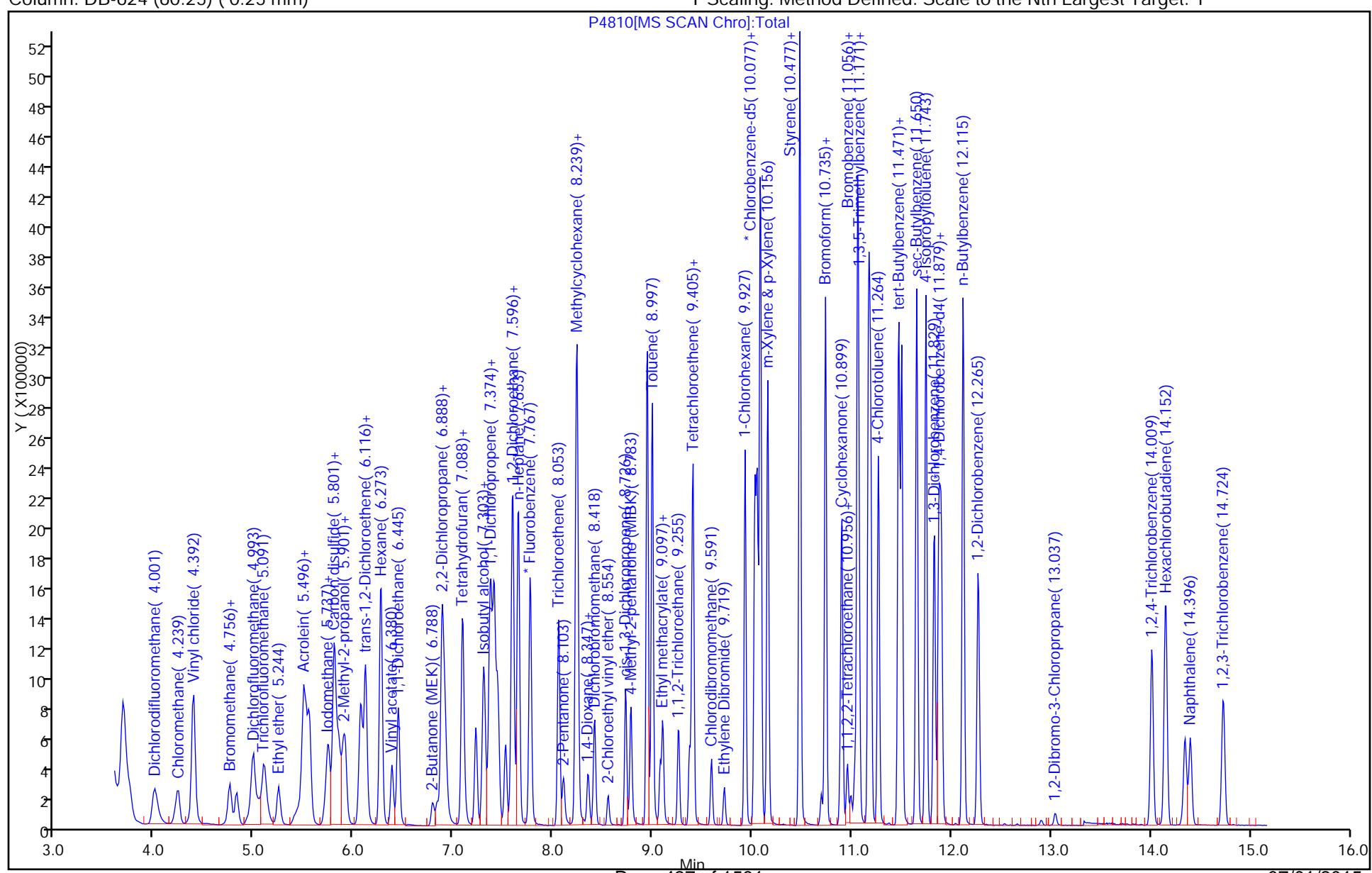
ALS Bottle#: 10

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



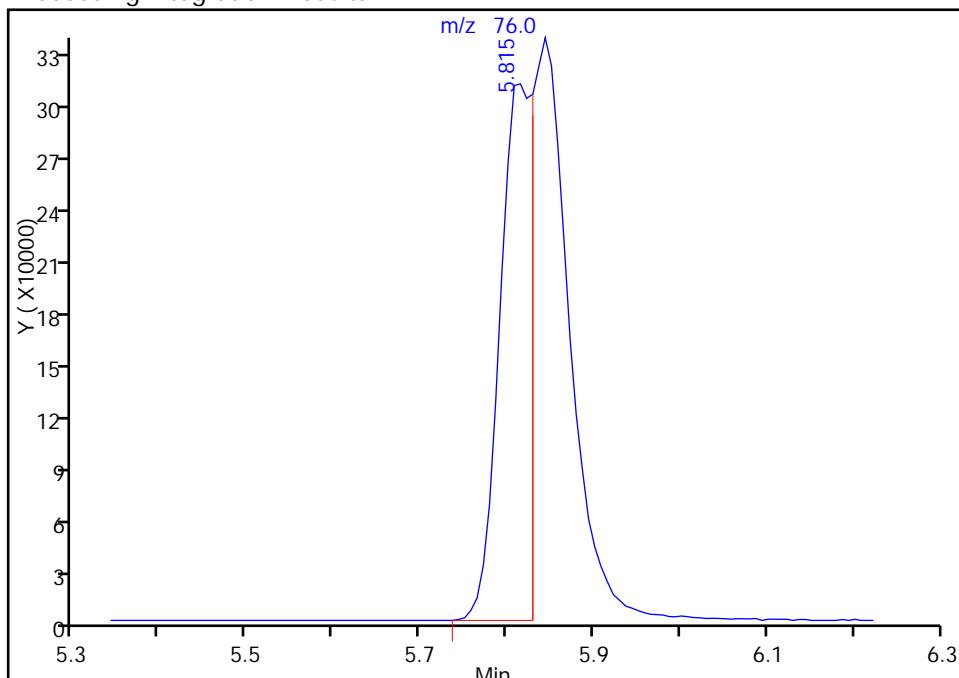
TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4810.D
 Injection Date: 02-Jun-2015 22:41:30 Instrument ID: VMS_P
 Lims ID: CCV
 Client ID:
 Operator ID: contrerase ALS Bottle#: 10 Worklist Smp#: 2
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

48 Carbon disulfide, CAS: 75-15-0

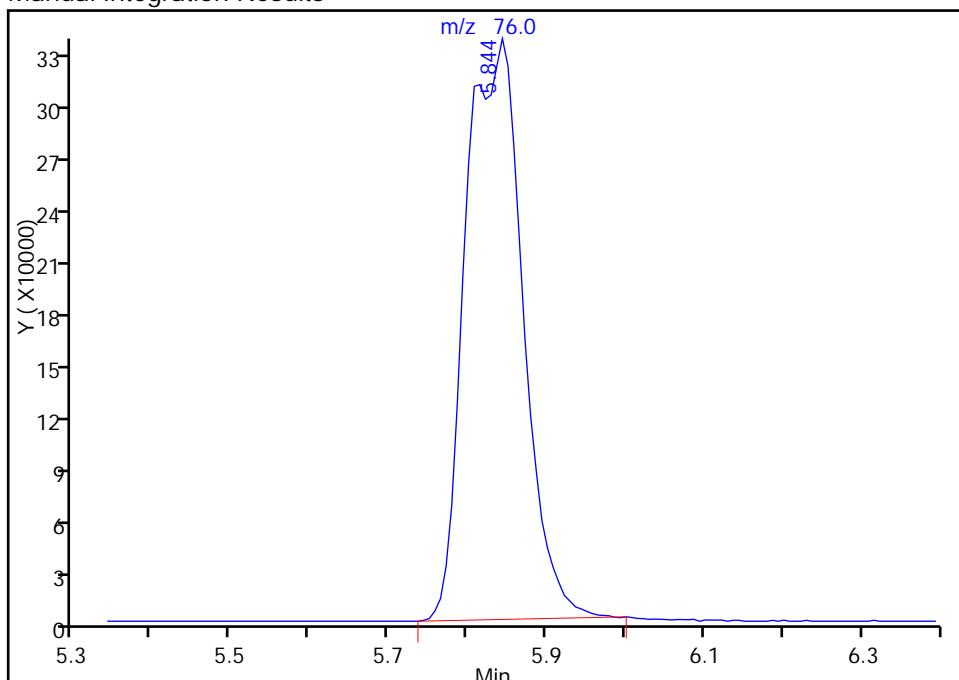
RT: 5.82
 Area: 835778
 Amount: 5.159783
 Amount Units: ug/l

Processing Integration Results



RT: 5.84
 Area: 1707828
 Amount: 10.543496
 Amount Units: ug/l

Manual Integration Results



Reviewer: contrerase, 02-Jun-2015 23:33:06

Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: CCV 280-280068/3 Calibration Date: 06/02/2015 23:01
Instrument ID: VMS_P Calib Start Date: 05/16/2015 14:32
GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 05/16/2015 16:09
Lab File ID: P4811.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropyl ether	Ave	0.1848	0.1926		0.0130	0.0125	4.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2704	0.2931		0.0130	0.0120	8.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2597	0.2909		0.0134	0.0120	12.0	20.0
Toluene-d8 (Surr)	Ave	5.156	5.497		0.0128	0.0120	6.6	20.0
4-Bromofluorobenzene (Surr)	Ave	1.178	1.183		0.0121	0.0120	0.4	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4811.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Jun-2015 23:01:30 ALS Bottle#: 11 Worklist Smp#: 3
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ccv
 Operator ID: contrerase Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub114
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:35:57 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: contrerase Date: 02-Jun-2015 23:33:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.800	5.800	0.000	92	166085	250.0	250.0	
* 1 Fluorobenzene	96	7.774	7.774	0.000	98	1452394	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.026	0.000	90	326391	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.871	0.000	98	465257	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.223	7.223	0.000	92	408602	12.0	13.0	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.524	7.524	0.000	100	405562	12.0	13.4	
\$ 7 Toluene-d8 (Surr)	98	8.946	8.946	0.000	95	1722326	12.0	12.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.898	10.898	0.000	86	528219	12.0	12.1	
28 Ethylene oxide	43	4.726	4.726	0.000	99	1433266	2000.0	2498.0	
33 Ethanol	45	5.117	5.117	0.000	98	70621	500.0	436.3	
38 Propene oxide	58	5.369	5.369	0.000	96	1521694	500.0	497.5	
42 Isopropyl alcohol	45	5.543	5.543	0.000	97	83075	100.0	112.0	
46 Acetonitrile	41	5.779	5.779	0.000	97	159249	125.0	109.6	
56 Isopropyl ether	87	6.387	6.387	0.000	93	279733	12.5	13.0	
58 2-Chloro-1,3-butadiene	53	6.515	6.515	0.000	95	745960	10.0	11.4	
59 Tert-butyl ethyl ether	59	6.666	6.666	0.000	97	898154	12.5	13.1	
60 Ethyl acetate	43	6.823	6.823	0.000	99	192965	20.0	21.8	
65 Propionitrile	54	6.909	6.909	0.000	98	184684	125.0	129.2	
66 Methacrylonitrile	41	7.030	7.030	0.000	96	917988	100.0	108.3	
75 Tert-amyl methyl ether	73	7.574	7.574	0.000	92	640615	12.5	13.4	
78 n-Butanol	56	7.802	7.802	0.000	26	93137	250.0	255.9	
81 Methyl methacrylate	100	8.189	8.189	0.000	93	52056	20.0	18.9	
88 2-Nitropropane	41	8.567	8.567	0.000	99	47814	20.0	21.4	
99 Tetrahydrothiophene	60	9.633	9.633	0.000	92	74790	10.0	8.50	
110 cis-1,4-Dichloro-2-butene	53	10.777	10.777	0.000	97	40253	10.0	9.55	
125 1,2,3-Trimethylbenzene	105	11.892	11.892	0.000	98	1341066	10.0	10.5	
16 1,3,5-Trichlorobenzene	180	13.244	13.244	0.000	95	576420	10.0	10.5	

Reagents:

MV-Supp A_00011	Amount Added: 5.00	Units: uL	
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Report Date: 03-Jun-2015 10:35:58

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

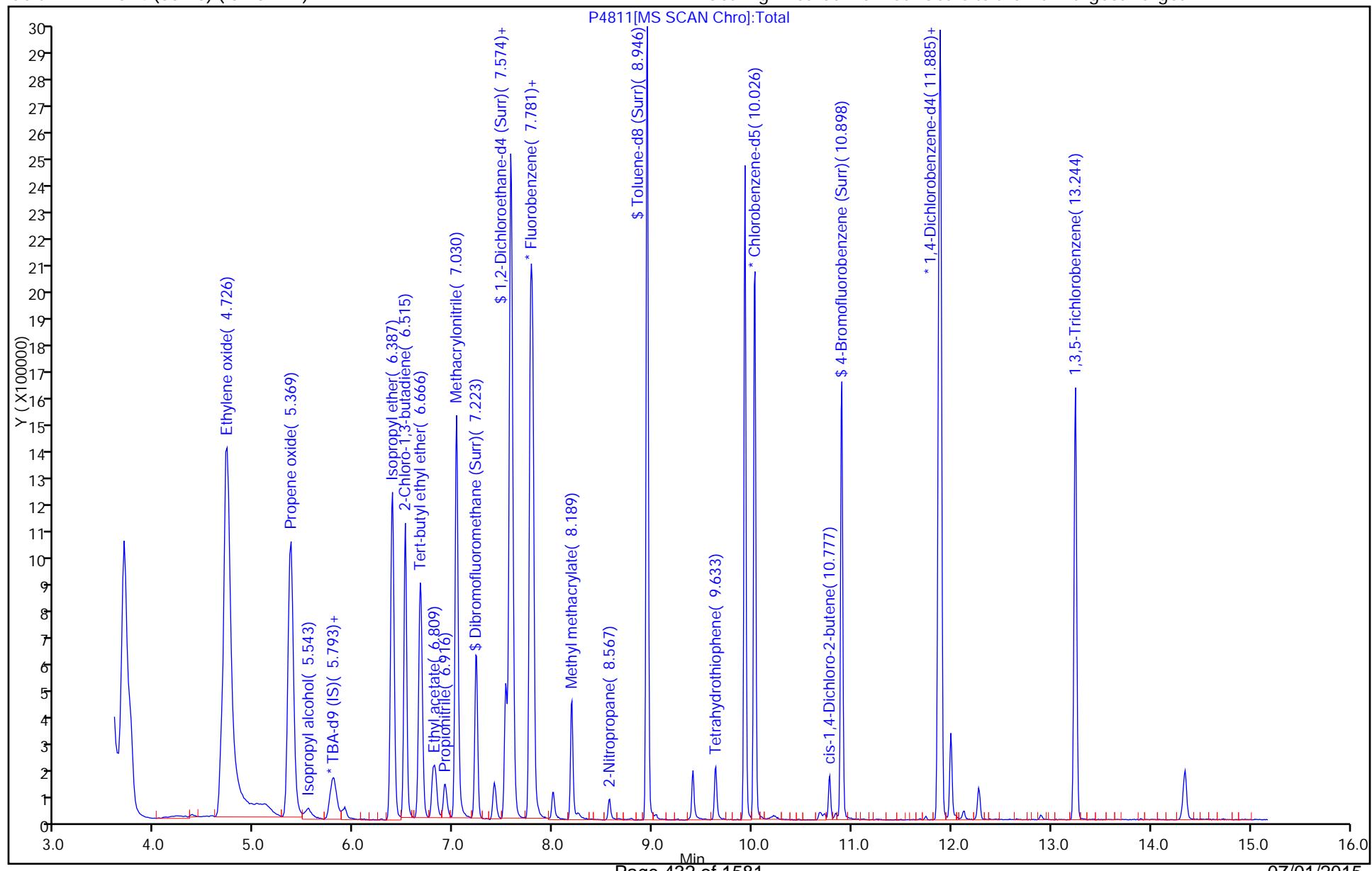
Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4811.D
 Injection Date: 02-Jun-2015 23:01:30
 Lims ID: CCV
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

Instrument ID: VMS_P

Operator ID: contrerase
Worklist Smp#: 3Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 11

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
 SDG No.: _____
 Lab Sample ID: CCVC 280-280068/22 Calibration Date: 06/03/2015 02:57
 Instrument ID: VMS_P Calib Start Date: 05/16/2015 14:32
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 05/16/2015 16:09
 Lab File ID: P4823.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2704	0.2829		0.0126	0.0120	4.6	
1,2-Dichloroethane-d4 (Surr)	Ave	0.2597	0.2641		0.0122	0.0120	1.7	
Toluene-d8 (Surr)	Ave	5.156	5.378		0.0125	0.0120	4.3	
4-Bromofluorobenzene (Surr)	Ave	1.178	1.077		0.0110	0.0120	-8.6	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4823.D
 Lims ID: ccvc
 Client ID:
 Sample Type: CCVC
 Inject. Date: 03-Jun-2015 02:57:30 ALS Bottle#: 23 Worklist Smp#: 22
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ccvc
 Operator ID: contrerase Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub78
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:35:45 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.787	5.787	0.000	40	156570	250.0	250.0	
* 1 Fluorobenzene	96	7.768	7.768	0.000	98	1437929	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.020	10.020	0.000	89	329807	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.865	11.865	0.000	97	526283	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.217	7.217	0.000	92	390532	12.0	12.6	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.518	7.518	0.000	100	364510	12.0	12.2	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.940	0.000	95	1702872	12.0	12.5	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.892	0.000	85	543901	12.0	11.0	
23 Dichlorodifluoromethane	85	4.001	4.001	0.000	100	532733	10.0	9.93	
26 Chloromethane	50	4.225	4.225	0.000	99	413666	10.0	10.4	
27 Vinyl chloride	62	4.378	4.378	0.000	100	420457	10.0	11.2	
29 Bromomethane	94	4.756	4.756	0.000	93	258479	10.0	10.8	
30 Chloroethane	64	4.825	4.825	0.000	97	235574	10.0	9.93	
31 Dichlorofluoromethane	67	4.979	4.979	0.000	98	785667	10.0	10.2	
32 Trichlorofluoromethane	101	5.091	5.091	0.000	100	789988	10.0	11.1	
35 Ethyl ether	59	5.244	5.244	0.000	95	192430	10.0	8.90	
39 Acrolein	56	5.412	5.412	0.000	99	123581	100.0	91.4	
40 1,1,2-Trichloro-1,2,2-trif	151	5.496	5.496	0.000	95	384710	10.0	10.3	
41 Acetone	43	5.496	5.496	0.000	98	182146	40.0	38.1	
43 1,1-Dichloroethene	96	5.544	5.544	0.000	95	426572	10.0	9.98	
44 Iodomethane	142	5.723	5.723	0.000	99	594494	10.0	9.44	
45 Methyl acetate	43	5.744	5.744	0.000	98	497086	50.0	45.0	
47 3-Chloro-1-propene	41	5.794	5.794	0.000	87	871735	10.0	10.0	
48 Carbon disulfide	76	5.809	5.809	0.000	100	1701091	10.0	10.2	
49 2-Methyl-2-propanol	59	5.852	5.852	0.000	30	90001	100.0	97.8	
50 Methylene Chloride	84	5.902	5.902	0.000	98	365714	10.0	9.36	
52 Acrylonitrile	53	6.066	6.066	0.000	98	456982	100.0	93.0	
51 Methyl tert-butyl ether	73	6.066	6.066	0.000	95	501281	10.0	8.72	
53 trans-1,2-Dichloroethene	96	6.109	6.109	0.000	95	427369	10.0	9.81	
54 Hexane	57	6.266	6.266	0.000	96	763365	10.0	9.71	
55 Vinyl acetate	43	6.381	6.381	0.000	98	656120	20.0	17.1	
57 1,1-Dichloroethane	63	6.445	6.445	0.000	97	805955	10.0	9.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 2-Butanone (MEK)	43	6.831	6.831	0.000	99	296666	40.0	37.3	
62 sec-Butyl Alcohol	45	6.874	6.874	0.000	43	198315	300.0	266.2	
63 cis-1,2-Dichloroethene	96	6.881	6.881	0.000	88	403795	10.0	9.78	
64 2,2-Dichloropropane	77	6.903	6.903	0.000	87	588188	10.0	10.3	
67 Chlorobromomethane	128	7.081	7.081	0.000	90	134197	10.0	9.43	
68 Chloroform	83	7.089	7.089	0.000	97	702506	10.0	10.2	
69 Tetrahydrofuran	42	7.110	7.110	0.000	79	67029	20.0	15.8	
70 Isobutyl alcohol	41	7.289	7.289	0.000	48	74177	250.0	218.3	
71 1,1,1-Trichloroethane	97	7.303	7.303	0.000	97	667879	10.0	10.4	
72 Cyclohexane	56	7.367	7.367	0.000	96	898522	10.0	9.91	
73 1,1-Dichloropropene	75	7.403	7.403	0.000	94	622385	10.0	10.1	
74 Carbon tetrachloride	117	7.439	7.439	0.000	96	610849	10.0	10.7	
76 1,2-Dichloroethane	62	7.575	7.575	0.000	96	393934	10.0	9.90	
77 Benzene	78	7.589	7.589	0.000	98	1643943	10.0	9.84	
14 n-Heptane	43	7.646	7.646	0.000	96	918226	10.0	10.1	
79 Trichloroethene	95	8.047	8.047	0.000	97	419171	10.0	9.56	
80 2-Pentanone	43	8.097	8.097	0.000	97	346684	40.0	32.5	
82 Methylcyclohexane	55	8.225	8.225	0.000	96	732164	10.0	10.1	
83 1,2-Dichloropropane	63	8.240	8.240	0.000	91	382780	10.0	9.59	
84 1,4-Dioxane	88	8.290	8.290	0.000	97	20598	200.0	158.0	
85 Dibromomethane	93	8.347	8.347	0.000	94	130039	10.0	9.76	
86 Dichlorobromomethane	83	8.411	8.411	0.000	98	421105	10.0	9.92	
87 2-Chloroethyl vinyl ether	63	8.547	8.547	0.000	93	72476	10.0	6.86	
89 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	90	426008	10.0	8.95	
90 4-Methyl-2-pentanone (MIBK)	43	8.776	8.776	0.000	99	499404	40.0	33.5	
91 Toluene	91	8.990	8.990	0.000	97	1720075	10.0	9.98	
92 Ethyl methacrylate	69	9.069	9.069	0.000	92	167080	10.0	7.64	
93 trans-1,3-Dichloropropene	75	9.098	9.098	0.000	96	302099	10.0	8.79	
94 1,1,2-Trichloroethane	97	9.255	9.255	0.000	94	172657	10.0	9.36	
95 2-Hexanone	43	9.362	9.362	0.000	97	316751	40.0	32.3	
96 1,3-Dichloropropane	76	9.391	9.391	0.000	98	336454	10.0	9.40	
97 Tetrachloroethene	164	9.398	9.398	0.000	96	344039	10.0	9.81	
98 Chlorodibromomethane	129	9.584	9.584	0.000	90	197881	10.0	8.68	
100 Ethylene Dibromide	107	9.713	9.713	0.000	98	148919	10.0	9.26	
101 1-Chlorohexane	91	9.920	9.920	0.000	88	559809	10.0	9.62	
102 Chlorobenzene	112	10.042	10.042	0.000	94	993845	10.0	9.74	
103 Ethylbenzene	106	10.077	10.077	0.000	98	614852	10.0	10.0	
104 1,1,2-Tetrachloroethane	131	10.077	10.077	0.000	93	300387	10.0	9.90	
105 m-Xylene & p-Xylene	106	10.149	10.149	0.000	99	729415	10.0	9.81	
107 o-Xylene	106	10.471	10.471	0.000	87	687329	10.0	10.1	
106 Styrene	104	10.471	10.471	0.000	84	1002204	10.0	10.1	
108 Bromoform	173	10.685	10.685	0.000	94	84258	10.0	8.00	
109 Isopropylbenzene	105	10.728	10.728	0.000	97	1956446	10.0	9.91	
111 Cyclohexanone	55	10.878	10.878	0.000	96	146709	400.0	320.8	
112 1,1,2,2-Tetrachloroethane	83	10.950	10.950	0.000	95	175975	10.0	9.02	
113 trans-1,4-Dichloro-2-butene	53	10.985	10.985	0.000	85	45804	10.0	8.14	
114 1,2,3-Trichloropropane	110	11.021	11.021	0.000	85	48851	10.0	9.10	
115 N-Propylbenzene	120	11.050	11.050	0.000	98	552584	10.0	9.82	
116 Bromobenzene	156	11.064	11.064	0.000	98	361960	10.0	9.68	
117 1,3,5-Trimethylbenzene	105	11.164	11.164	0.000	95	1617487	10.0	10.2	
118 2-Chlorotoluene	126	11.178	11.178	0.000	95	445643	10.0	9.74	
119 4-Chlorotoluene	126	11.257	11.257	0.000	99	436114	10.0	9.71	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 tert-Butylbenzene	119	11.464	11.464	0.000	93	1640868	10.0	10.1	
121 1,2,4-Trimethylbenzene	105	11.493	11.493	0.000	99	1627723	10.0	10.2	
122 sec-Butylbenzene	134	11.643	11.643	0.000	96	464846	10.0	10.0	
123 4-Isopropyltoluene	119	11.736	11.736	0.000	97	1870029	10.0	10.3	
124 1,3-Dichlorobenzene	146	11.822	11.822	0.000	97	783933	10.0	9.60	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	92	766137	10.0	9.41	
127 n-Butylbenzene	91	12.108	12.108	0.000	99	1905141	10.0	10.4	
128 1,2-Dichlorobenzene	146	12.265	12.265	0.000	94	648650	10.0	9.52	
129 1,2-Dibromo-3-Chloropropan	157	13.037	13.037	0.000	70	19979	10.0	6.95	
130 1,2,4-Trichlorobenzene	180	14.003	14.003	0.000	93	428825	10.0	9.09	
131 Hexachlorobutadiene	225	14.146	14.146	0.000	96	352242	10.0	9.76	
132 Naphthalene	128	14.389	14.389	0.000	98	580631	10.0	9.24	
133 1,2,3-Trichlorobenzene	180	14.725	14.725	0.000	94	346533	10.0	9.29	
S 140 1,2-Dichloroethene, Total	96				0		20.0	19.6	
S 138 1,2-Dichloroethene, Total	1				0		20.0	19.6	
S 139 Xylenes, Total	106				0		20.0	19.9	
S 137 1,3-Dichloropropene, Total	1				0		20.0	17.7	
S 134 Trihalomethanes, Total	1				0		40.0	36.8	
S 135 Xylenes, Total (URS)	1				0		20.0	19.9	
S 136 Total BTEX	1				0			49.8	

Reagents:

MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL	
MV-Main A_00022	Amount Added: 5.00	Units: uL	
MV-2cleve+AVA_00010	Amount Added: 5.00	Units: uL	
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Report Date: 03-Jun-2015 10:35:46

Chrom Revision: 2.2 05-May-2015 11:39:10

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4823.D

Injection Date: 03-Jun-2015 02:57:30

Instrument ID: VMS_P

Lims ID: ccvc

Operator ID: contrerase

Client ID:

Worklist Smp#: 22

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

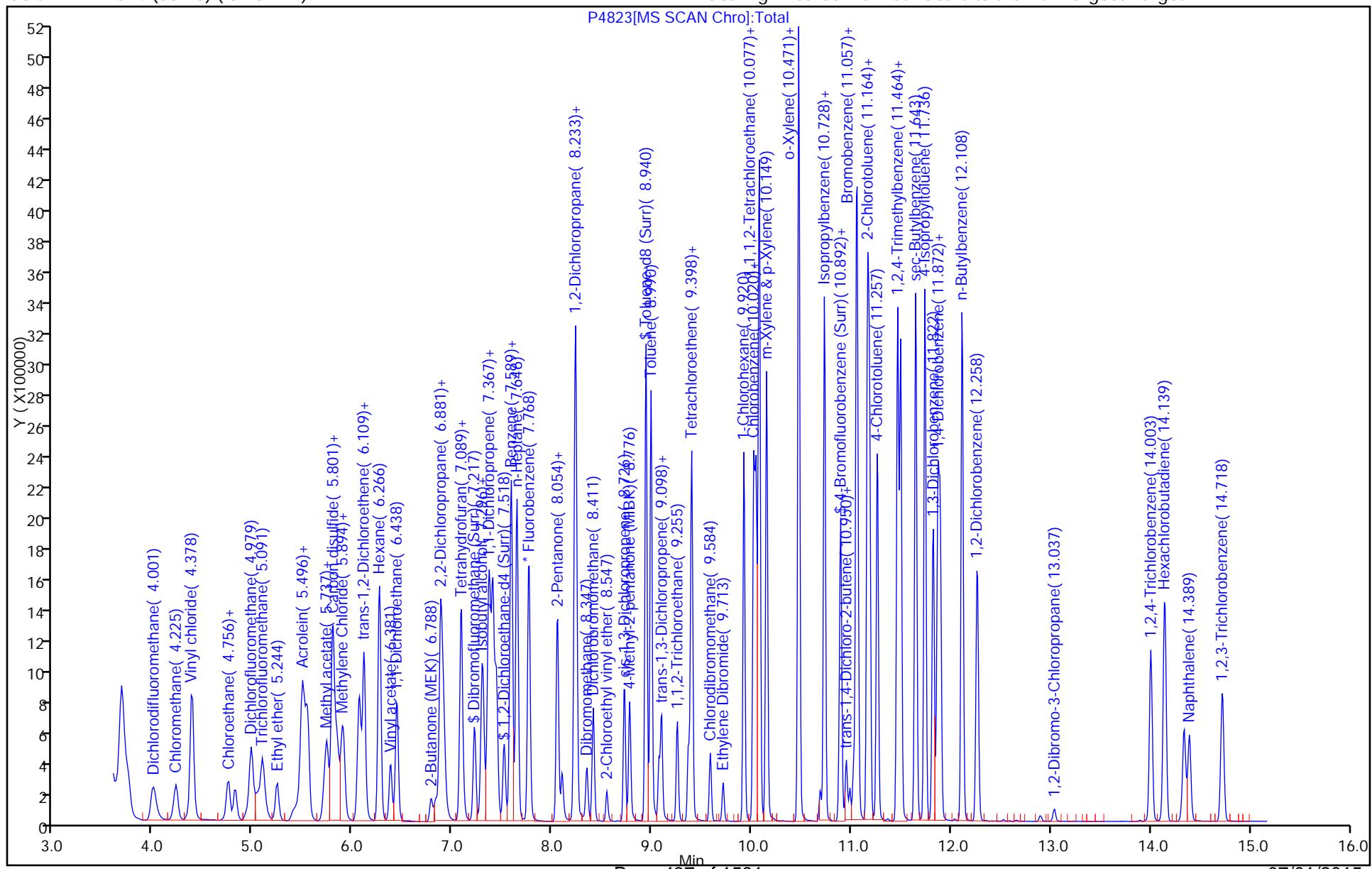
ALS Bottle#: 23

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Lab Sample ID: CCVC 280-280068/22

Calibration Date: 06/03/2015 02:57

Instrument ID: VMS_P

Calib Start Date: 06/02/2015 12:15

GC Column: DB-624 (60.25) ID: 0.25 (mm)

Calib End Date: 06/02/2015 14:13

Lab File ID: P4823.D

Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.4631		0.00993	0.0100	-0.7	
Chloromethane	Ave	0.3460	0.3596		0.0104	0.0100	3.9	
Vinyl chloride	Ave	0.3271	0.3655		0.0112	0.0100	11.7	
Bromomethane	Ave	0.2076	0.2247		0.0108	0.0100	8.2	
Chloroethane	Ave	0.2063	0.2048		0.00993	0.0100	-0.7	
Trichlorofluoromethane	Ave	0.6173	0.6867		0.0111	0.0100	11.2	
Acetone	Lin2		0.0396		0.0381	0.0400	-4.6	
1,1-Dichloroethene	Ave	0.3714	0.3708		0.00998	0.0100	-0.2	
Carbon disulfide	Ave	1.452	1.479		0.0102	0.0100	1.8	
Methylene Chloride	Lin2		0.3179		0.00936	0.0100	-6.4	
Methyl tert-butyl ether	Ave	0.4996	0.4358		0.00872	0.0100	-12.8	
trans-1,2-Dichloroethene	Ave	0.3786	0.3715		0.00981	0.0100	-1.9	
1,1-Dichloroethane	Ave	0.7088	0.7006		0.00988	0.0100	-1.2	
2-Butanone (MEK)	Lin1		0.0645		0.0373	0.0400	-6.7	
cis-1,2-Dichloroethene	Ave	0.3587	0.3510		0.00978	0.0100	-2.2	
2,2-Dichloropropane	Ave	0.4957	0.5113		0.0103	0.0100	3.2	
Bromochloromethane	Ave	0.1237	0.1167		0.00943	0.0100	-5.7	
Chloroform	Ave	0.6003	0.6107		0.0102	0.0100	1.7	
1,1,1-Trichloroethane	Ave	0.5592	0.5806		0.0104	0.0100	3.8	
1,1-Dichloropropene	Ave	0.5353	0.5410		0.0101	0.0100	1.1	
Carbon tetrachloride	Ave	0.4982	0.5310		0.0107	0.0100	6.6	
1,2-Dichloroethane	Ave	0.3460	0.3425		0.00990	0.0100	-1.0	
Benzene	Ave	1.452	1.429		0.00984	0.0100	-1.6	
Trichloroethene	Ave	0.3811	0.3644		0.00956	0.0100	-4.4	
1,2-Dichloropropane	Ave	0.3468	0.3328		0.00959	0.0100	-4.1	
Dibromomethane	Ave	0.1159	0.1130		0.00976	0.0100	-2.4	
Bromodichloromethane	Ave	0.3690	0.3661		0.00992	0.0100	-0.8	
cis-1,3-Dichloropropene	Lin1		1.615		0.00895	0.0100	-10.5	
4-Methyl-2-pentanone (MIBK)	Lin1		0.1085		0.0335	0.0400	-16.2	
Toluene	Ave	1.498	1.495		0.00998	0.0100	-0.2	
trans-1,3-Dichloropropene	Lin1		0.2626		0.00879	0.0100	-12.1	
1,1,2-Trichloroethane	Ave	0.1604	0.1501		0.00936	0.0100	-6.4	
2-Hexanone	Lin1		0.3001		0.0323	0.0400	-19.1	
1,3-Dichloropropane	Ave	1.357	1.275		0.00940	0.0100	-6.0	
Tetrachloroethene	Ave	1.329	1.304		0.00981	0.0100	-1.9	
Dibromochloromethane	Lin1		0.7500		0.00868	0.0100	-13.2	
Ethylene Dibromide	Ave	0.6095	0.5644		0.00926	0.0100	-7.4	
Chlorobenzene	Ave	3.868	3.767		0.00974	0.0100	-2.6	
1,1,1,2-Tetrachloroethane	Ave	1.150	1.139		0.00990	0.0100	-1.0	
Ethylbenzene	Ave	2.325	2.330		0.0100	0.0100	0.2	
m-Xylene & p-Xylene	Ave	2.817	2.765		0.00981	0.0100	-1.9	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: CCVC 280-280068/22 Calibration Date: 06/03/2015 02:57
Instrument ID: VMS_P Calib Start Date: 06/02/2015 12:15
GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/02/2015 14:13
Lab File ID: P4823.D Conc. Units: mg/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
o-Xylene	Ave	2.576	2.605		0.0101	0.0100	1.1	
Styrene	Lin1		3.798		0.0101	0.0100	0.6	
Bromoform	Lin1		0.3194		0.00800	0.0100	-20.0	
Isopropylbenzene	Ave	4.689	4.647		0.00991	0.0100	-0.9	
1,1,2,2-Tetrachloroethane	Ave	0.4635	0.4180		0.00902	0.0100	-9.8	
1,2,3-Trichloropropane	Lin1		0.1160		0.00910	0.0100	-9.0	
N-Propylbenzene	Ave	1.337	1.312		0.00982	0.0100	-1.8	
Bromobenzene	Ave	0.8877	0.8597		0.00968	0.0100	-3.2	
1,3,5-Trimethylbenzene	Ave	3.759	3.842		0.0102	0.0100	2.2	
2-Chlorotoluene	Ave	1.087	1.058		0.00974	0.0100	-2.6	
4-Chlorotoluene	Ave	1.067	1.036		0.00971	0.0100	-2.9	
tert-Butylbenzene	Ave	3.863	3.897		0.0101	0.0100	0.9	
1,2,4-Trimethylbenzene	Ave	3.806	3.866		0.0102	0.0100	1.6	
sec-Butylbenzene	Ave	1.100	1.104		0.0100	0.0100	0.3	
4-Isopropyltoluene	Ave	4.331	4.442		0.0103	0.0100	2.6	
1,3-Dichlorobenzene	Ave	1.940	1.862		0.00960	0.0100	-4.0	
1,4-Dichlorobenzene	Ave	1.934	1.820		0.00941	0.0100	-5.9	
n-Butylbenzene	Ave	4.368	4.525		0.0104	0.0100	3.6	
1,2-Dichlorobenzene	Ave	1.618	1.541		0.00952	0.0100	-4.8	
1,2-Dibromo-3-Chloropropane	Lin2		0.0475		0.00695	0.0100	-30.5	
1,2,4-Trichlorobenzene	Ave	1.120	1.019		0.00909	0.0100	-9.1	
Hexachlorobutadiene	Ave	0.8570	0.8366		0.00976	0.0100	-2.4	
Naphthalene	Ave	1.492	1.379		0.00924	0.0100	-7.6	
1,2,3-Trichlorobenzene	Ave	0.8862	0.8231		0.00929	0.0100	-7.1	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4823.D
 Lims ID: ccvc
 Client ID:
 Sample Type: CCVC
 Inject. Date: 03-Jun-2015 02:57:30 ALS Bottle#: 23 Worklist Smp#: 22
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: ccvc
 Operator ID: contrerase Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub78
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:35:45 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.787	5.787	0.000	40	156570	250.0	250.0	
* 1 Fluorobenzene	96	7.768	7.768	0.000	98	1437929	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.020	10.020	0.000	89	329807	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.865	11.865	0.000	97	526283	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.217	7.217	0.000	92	390532	12.0	12.6	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.518	7.518	0.000	100	364510	12.0	12.2	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.940	0.000	95	1702872	12.0	12.5	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.892	10.892	0.000	85	543901	12.0	11.0	
23 Dichlorodifluoromethane	85	4.001	4.001	0.000	100	532733	10.0	9.93	
26 Chloromethane	50	4.225	4.225	0.000	99	413666	10.0	10.4	
27 Vinyl chloride	62	4.378	4.378	0.000	100	420457	10.0	11.2	
29 Bromomethane	94	4.756	4.756	0.000	93	258479	10.0	10.8	
30 Chloroethane	64	4.825	4.825	0.000	97	235574	10.0	9.93	
31 Dichlorofluoromethane	67	4.979	4.979	0.000	98	785667	10.0	10.2	
32 Trichlorofluoromethane	101	5.091	5.091	0.000	100	789988	10.0	11.1	
35 Ethyl ether	59	5.244	5.244	0.000	95	192430	10.0	8.90	
39 Acrolein	56	5.412	5.412	0.000	99	123581	100.0	91.4	
40 1,1,2-Trichloro-1,2,2-trif	151	5.496	5.496	0.000	95	384710	10.0	10.3	
41 Acetone	43	5.496	5.496	0.000	98	182146	40.0	38.1	
43 1,1-Dichloroethene	96	5.544	5.544	0.000	95	426572	10.0	9.98	
44 Iodomethane	142	5.723	5.723	0.000	99	594494	10.0	9.44	
45 Methyl acetate	43	5.744	5.744	0.000	98	497086	50.0	45.0	
47 3-Chloro-1-propene	41	5.794	5.794	0.000	87	871735	10.0	10.0	
48 Carbon disulfide	76	5.809	5.809	0.000	100	1701091	10.0	10.2	
49 2-Methyl-2-propanol	59	5.852	5.852	0.000	30	90001	100.0	97.8	
50 Methylene Chloride	84	5.902	5.902	0.000	98	365714	10.0	9.36	
52 Acrylonitrile	53	6.066	6.066	0.000	98	456982	100.0	93.0	
51 Methyl tert-butyl ether	73	6.066	6.066	0.000	95	501281	10.0	8.72	
53 trans-1,2-Dichloroethene	96	6.109	6.109	0.000	95	427369	10.0	9.81	
54 Hexane	57	6.266	6.266	0.000	96	763365	10.0	9.71	
55 Vinyl acetate	43	6.381	6.381	0.000	98	656120	20.0	17.1	
57 1,1-Dichloroethane	63	6.445	6.445	0.000	97	805955	10.0	9.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 2-Butanone (MEK)	43	6.831	6.831	0.000	99	296666	40.0	37.3	
62 sec-Butyl Alcohol	45	6.874	6.874	0.000	43	198315	300.0	266.2	
63 cis-1,2-Dichloroethene	96	6.881	6.881	0.000	88	403795	10.0	9.78	
64 2,2-Dichloropropane	77	6.903	6.903	0.000	87	588188	10.0	10.3	
67 Chlorobromomethane	128	7.081	7.081	0.000	90	134197	10.0	9.43	
68 Chloroform	83	7.089	7.089	0.000	97	702506	10.0	10.2	
69 Tetrahydrofuran	42	7.110	7.110	0.000	79	67029	20.0	15.8	
70 Isobutyl alcohol	41	7.289	7.289	0.000	48	74177	250.0	218.3	
71 1,1,1-Trichloroethane	97	7.303	7.303	0.000	97	667879	10.0	10.4	
72 Cyclohexane	56	7.367	7.367	0.000	96	898522	10.0	9.91	
73 1,1-Dichloropropene	75	7.403	7.403	0.000	94	622385	10.0	10.1	
74 Carbon tetrachloride	117	7.439	7.439	0.000	96	610849	10.0	10.7	
76 1,2-Dichloroethane	62	7.575	7.575	0.000	96	393934	10.0	9.90	
77 Benzene	78	7.589	7.589	0.000	98	1643943	10.0	9.84	
14 n-Heptane	43	7.646	7.646	0.000	96	918226	10.0	10.1	
79 Trichloroethene	95	8.047	8.047	0.000	97	419171	10.0	9.56	
80 2-Pentanone	43	8.097	8.097	0.000	97	346684	40.0	32.5	
82 Methylcyclohexane	55	8.225	8.225	0.000	96	732164	10.0	10.1	
83 1,2-Dichloropropane	63	8.240	8.240	0.000	91	382780	10.0	9.59	
84 1,4-Dioxane	88	8.290	8.290	0.000	97	20598	200.0	158.0	
85 Dibromomethane	93	8.347	8.347	0.000	94	130039	10.0	9.76	
86 Dichlorobromomethane	83	8.411	8.411	0.000	98	421105	10.0	9.92	
87 2-Chloroethyl vinyl ether	63	8.547	8.547	0.000	93	72476	10.0	6.86	
89 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	90	426008	10.0	8.95	
90 4-Methyl-2-pentanone (MIBK)	43	8.776	8.776	0.000	99	499404	40.0	33.5	
91 Toluene	91	8.990	8.990	0.000	97	1720075	10.0	9.98	
92 Ethyl methacrylate	69	9.069	9.069	0.000	92	167080	10.0	7.64	
93 trans-1,3-Dichloropropene	75	9.098	9.098	0.000	96	302099	10.0	8.79	
94 1,1,2-Trichloroethane	97	9.255	9.255	0.000	94	172657	10.0	9.36	
95 2-Hexanone	43	9.362	9.362	0.000	97	316751	40.0	32.3	
96 1,3-Dichloropropane	76	9.391	9.391	0.000	98	336454	10.0	9.40	
97 Tetrachloroethene	164	9.398	9.398	0.000	96	344039	10.0	9.81	
98 Chlorodibromomethane	129	9.584	9.584	0.000	90	197881	10.0	8.68	
100 Ethylene Dibromide	107	9.713	9.713	0.000	98	148919	10.0	9.26	
101 1-Chlorohexane	91	9.920	9.920	0.000	88	559809	10.0	9.62	
102 Chlorobenzene	112	10.042	10.042	0.000	94	993845	10.0	9.74	
103 Ethylbenzene	106	10.077	10.077	0.000	98	614852	10.0	10.0	
104 1,1,2-Tetrachloroethane	131	10.077	10.077	0.000	93	300387	10.0	9.90	
105 m-Xylene & p-Xylene	106	10.149	10.149	0.000	99	729415	10.0	9.81	
107 o-Xylene	106	10.471	10.471	0.000	87	687329	10.0	10.1	
106 Styrene	104	10.471	10.471	0.000	84	1002204	10.0	10.1	
108 Bromoform	173	10.685	10.685	0.000	94	84258	10.0	8.00	
109 Isopropylbenzene	105	10.728	10.728	0.000	97	1956446	10.0	9.91	
111 Cyclohexanone	55	10.878	10.878	0.000	96	146709	400.0	320.8	
112 1,1,2,2-Tetrachloroethane	83	10.950	10.950	0.000	95	175975	10.0	9.02	
113 trans-1,4-Dichloro-2-butene	53	10.985	10.985	0.000	85	45804	10.0	8.14	
114 1,2,3-Trichloropropane	110	11.021	11.021	0.000	85	48851	10.0	9.10	
115 N-Propylbenzene	120	11.050	11.050	0.000	98	552584	10.0	9.82	
116 Bromobenzene	156	11.064	11.064	0.000	98	361960	10.0	9.68	
117 1,3,5-Trimethylbenzene	105	11.164	11.164	0.000	95	1617487	10.0	10.2	
118 2-Chlorotoluene	126	11.178	11.178	0.000	95	445643	10.0	9.74	
119 4-Chlorotoluene	126	11.257	11.257	0.000	99	436114	10.0	9.71	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 tert-Butylbenzene	119	11.464	11.464	0.000	93	1640868	10.0	10.1	
121 1,2,4-Trimethylbenzene	105	11.493	11.493	0.000	99	1627723	10.0	10.2	
122 sec-Butylbenzene	134	11.643	11.643	0.000	96	464846	10.0	10.0	
123 4-Isopropyltoluene	119	11.736	11.736	0.000	97	1870029	10.0	10.3	
124 1,3-Dichlorobenzene	146	11.822	11.822	0.000	97	783933	10.0	9.60	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	92	766137	10.0	9.41	
127 n-Butylbenzene	91	12.108	12.108	0.000	99	1905141	10.0	10.4	
128 1,2-Dichlorobenzene	146	12.265	12.265	0.000	94	648650	10.0	9.52	
129 1,2-Dibromo-3-Chloropropan	157	13.037	13.037	0.000	70	19979	10.0	6.95	
130 1,2,4-Trichlorobenzene	180	14.003	14.003	0.000	93	428825	10.0	9.09	
131 Hexachlorobutadiene	225	14.146	14.146	0.000	96	352242	10.0	9.76	
132 Naphthalene	128	14.389	14.389	0.000	98	580631	10.0	9.24	
133 1,2,3-Trichlorobenzene	180	14.725	14.725	0.000	94	346533	10.0	9.29	
S 140 1,2-Dichloroethene, Total	96				0		20.0	19.6	
S 138 1,2-Dichloroethene, Total	1				0		20.0	19.6	
S 139 Xylenes, Total	106				0		20.0	19.9	
S 137 1,3-Dichloropropene, Total	1				0		20.0	17.7	
S 134 Trihalomethanes, Total	1				0		40.0	36.8	
S 135 Xylenes, Total (URS)	1				0		20.0	19.9	
S 136 Total BTEX	1				0			49.8	

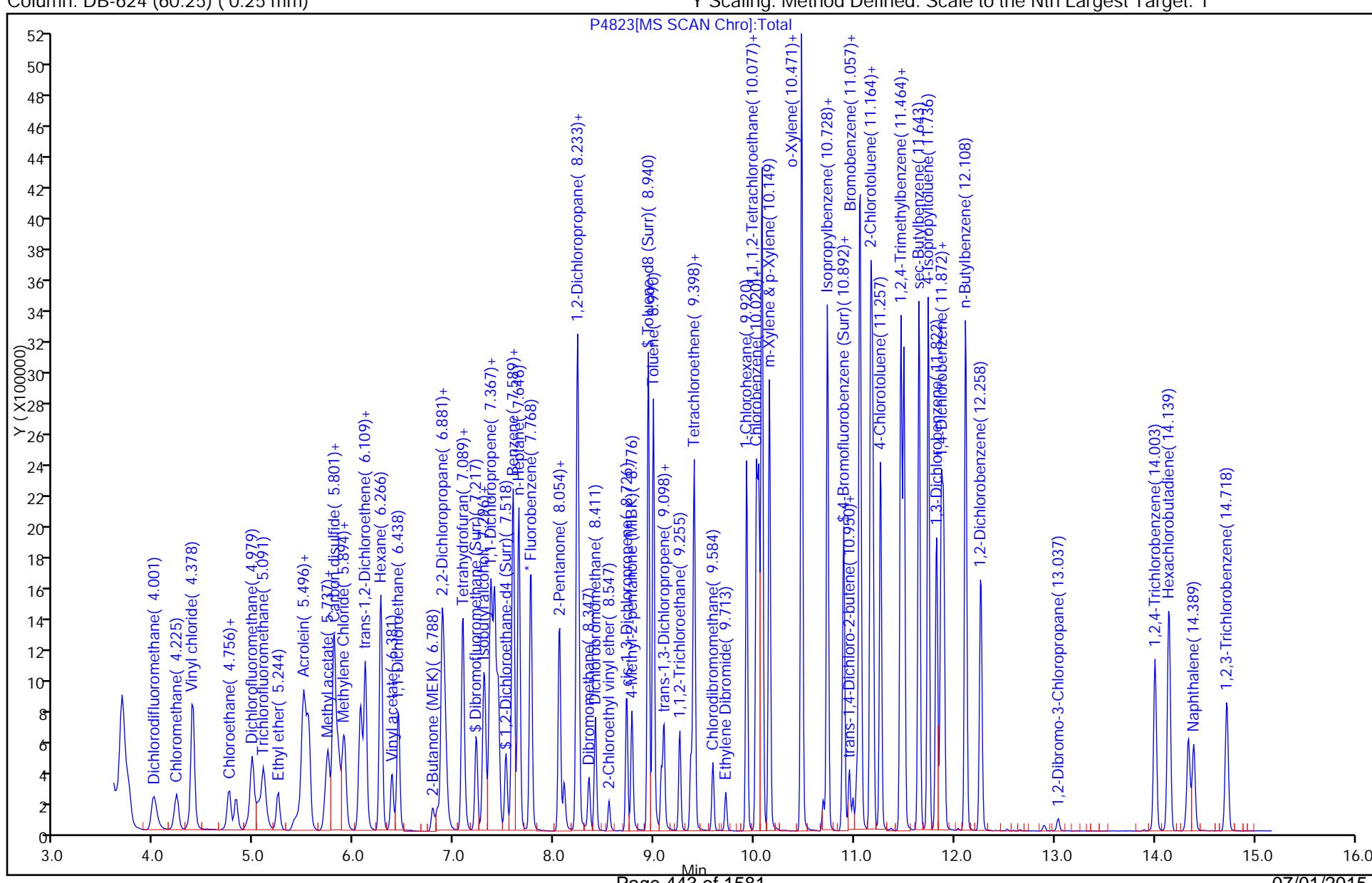
Reagents:

MV-Gas/Ket A_00033	Amount Added: 5.00	Units: uL	
MV-Main A_00022	Amount Added: 5.00	Units: uL	
MV-2cleve+AVA_00010	Amount Added: 5.00	Units: uL	
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4823.D
 Injection Date: 03-Jun-2015 02:57:30
 Lims ID: ccvc
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

TestAmerica Denver
 Instrument ID: VMS_P
 Operator ID: contrerase
 Worklist Smp#: 22
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 ALS Bottle#: 23

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2946.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 27-May-2015 23:12:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: bfb
 Operator ID: BERGERB Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35452.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-May-2015 07:24:25 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK018

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 7 BFB

95 2.473 2.473 0.000 80 242466

NR

NR

7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

MV-BFB_00018

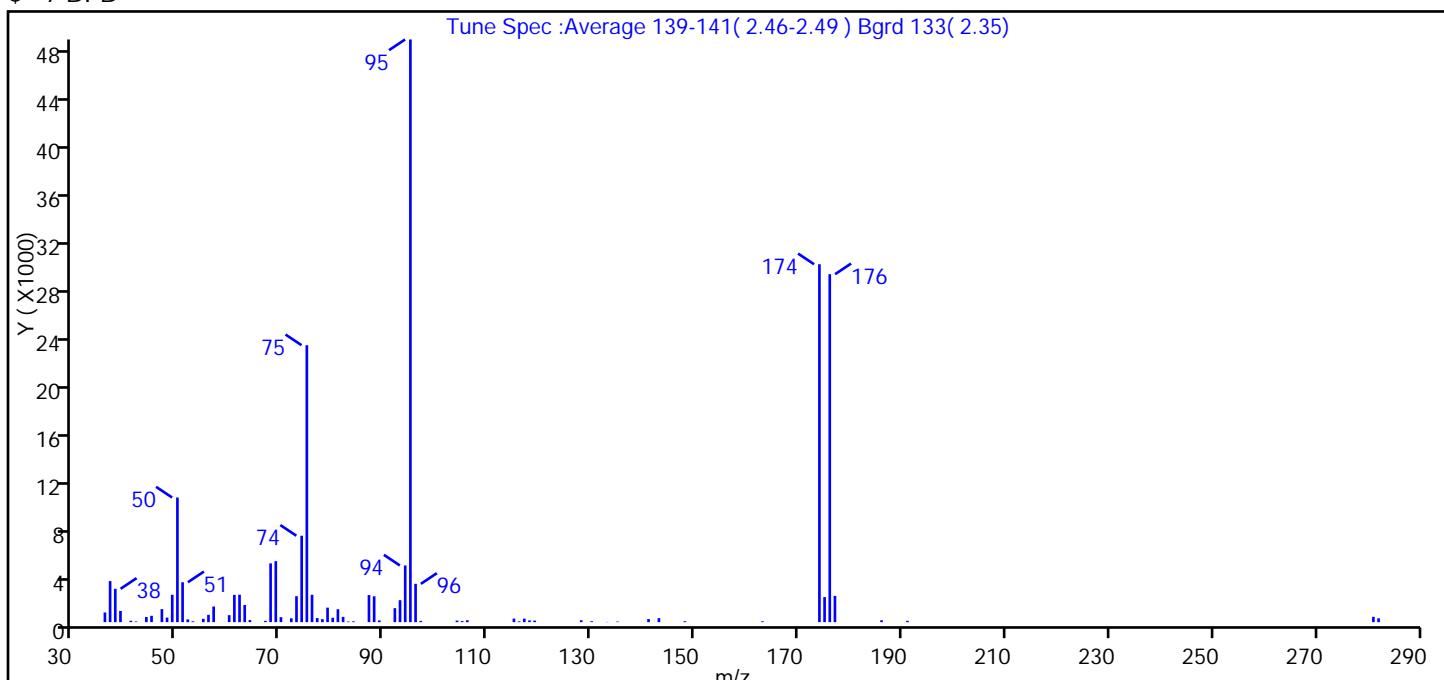
Amount Added: 1.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2946.D
 Injection Date: 27-May-2015 23:12:30 Instrument ID: VMS_H
 Lims ID: BFB
 Client ID:
 Operator ID: BERGERB ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Tune Method: BFB Method 8260

\$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.4
75	30 to 60% of m/z 95	47.5
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	61.4
175	5 to 9% of m/z 174	4.3 (7.0)
176	Greater than 95% but less than 101% of m/z 174	59.7 (97.2)
177	5 to 9% of m/z 176	4.5 (7.5)

Data File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2946.D\AQ_VMSH_8260.rslt\spectra.d
 Injection Date: 27-May-2015 23:12:30
 Spectrum: Tune Spec :Average 139-141(2.46-2.49) Bgrd 133(2.35)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	809	61.00	2285	83.00	52	128.00	159
37.00	3436	62.00	2299	84.00	69	130.00	74
38.00	2792	63.00	1438	87.00	2266	133.00	20
39.00	939	64.00	173	88.00	2165	135.00	48
41.00	117	67.00	104	89.00	142	141.00	257
42.00	54	68.00	4921	92.00	1170	143.00	334
44.00	430	69.00	5103	93.00	1837	148.00	76
45.00	530	70.00	417	94.00	4743	163.00	72
47.00	1090	72.00	320	95.00	48776	170.00	1
48.00	381	73.00	2173	96.00	3207	174.00	29960
49.00	2291	74.00	7234	97.00	103	175.00	2097
50.00	10434	75.00	23184	104.00	132	176.00	29128
51.00	3342	76.00	2287	105.00	89	177.00	2198
52.00	227	77.00	342	106.00	160	186.00	156
53.00	70	78.00	250	115.00	296	191.00	111
55.00	277	79.00	1215	116.00	67	281.00	446
56.00	610	80.00	368	117.00	292	282.00	322
57.00	1309	81.00	1081	118.00	144		
60.00	584	82.00	442	119.00	128		

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2997.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 28-May-2015 18:54:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:54:23 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:54:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 7 BFB

95 2.475 2.475 0.000 78 259559 NR NR 7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

MV-BFB_00018

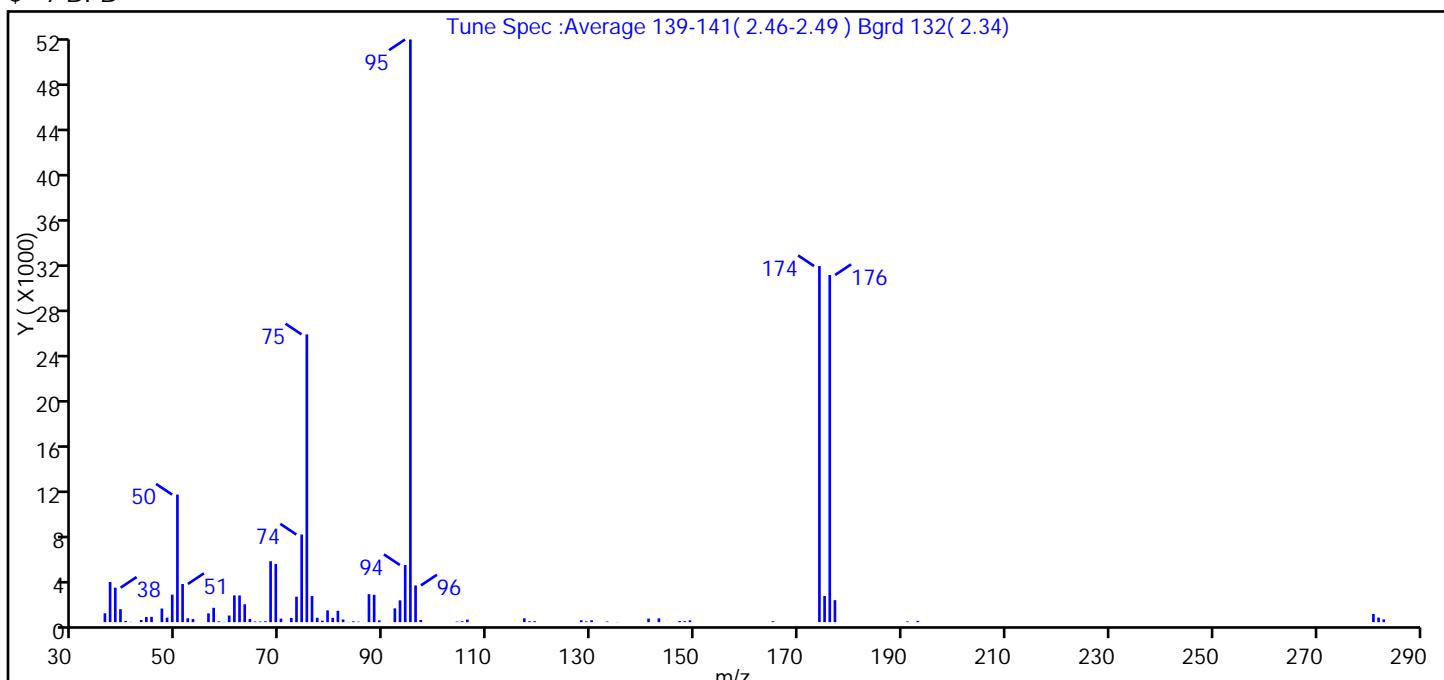
Amount Added: 1.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2997.D
 Injection Date: 28-May-2015 18:54:30 Instrument ID: VMS_H
 Lims ID: BFB
 Client ID:
 Operator ID: bergerb ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Tune Method: BFB Method 8260

\$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.9
75	30 to 60% of m/z 95	49.4
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	61.1
175	5 to 9% of m/z 174	4.5 (7.4)
176	Greater than 95% but less than 101% of m/z 174	59.6 (97.5)
177	5 to 9% of m/z 176	3.8 (6.3)

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H2997.D\AQ_VMSH_8260.rslt\spectra.d
 Injection Date: 28-May-2015 18:54:30
 Spectrum: Tune Spec :Average 139-141(2.46-2.49) Bgrd 132(2.34)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	787	60.00	590	82.00	239	129.00	69
37.00	3565	61.00	2374	83.00	16	130.00	169
38.00	3060	62.00	2368	84.00	69	133.00	55
39.00	1151	63.00	1588	85.00	39	135.00	14
40.00	101	64.00	287	87.00	2484	141.00	312
41.00	18	65.00	54	88.00	2427	143.00	335
42.00	5	66.00	55	89.00	155	147.00	103
43.00	188	67.00	79	92.00	1227	148.00	83
44.00	464	68.00	5408	93.00	1939	149.00	157
45.00	473	69.00	5166	94.00	5071	165.00	77
47.00	1209	70.00	309	95.00	51736	174.00	31616
48.00	400	72.00	376	96.00	3259	175.00	2327
49.00	2443	73.00	2264	97.00	191	176.00	30824
50.00	11326	74.00	7779	104.00	50	177.00	1954
51.00	3389	75.00	25552	105.00	76	191.00	62
52.00	343	76.00	2316	106.00	227	193.00	115
53.00	273	77.00	388	115.00	3	281.00	729
56.00	777	78.00	135	117.00	339	282.00	404
57.00	1274	79.00	1044	118.00	78	283.00	247
58.00	72	80.00	385	119.00	80		
59.00	20	81.00	1011	128.00	169		

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4170.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 16-May-2015 10:50:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: CONTRERASE Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150516-35095.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 18-May-2015 11:51:03 Calib Date: 16-May-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4186.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK015

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 4 BFB

95 5.141 5.141 0.000 83 123956

NR

NR

7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

MV-BFB_00017

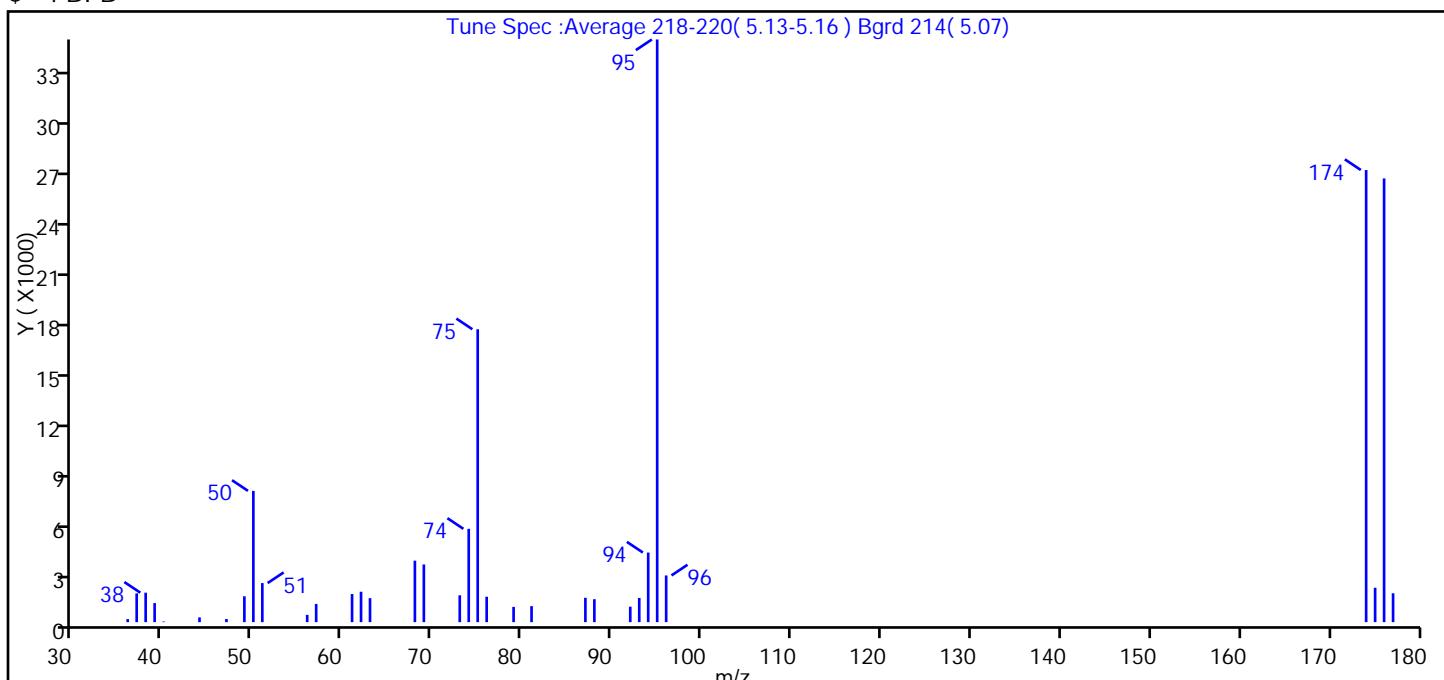
Amount Added: 1.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4170.D
 Injection Date: 16-May-2015 10:50:30 Instrument ID: VMS_P
 Lims ID: BFB
 Client ID:
 Operator ID: CONTRERASE ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.5
75	30 to 60% of m/z 95	50.3
96	5 to 9% of m/z 95	8.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	77.6
175	5 to 9% of m/z 174	5.9 (7.6)
176	Greater than 95% but less than 101% of m/z 174	76.2 (98.1)
177	5 to 9% of m/z 176	5.0 (6.5)

Data File: \\Denchrom\ChromData\VMS_P\20150516-35095.b\P4170.D\AQ_VMSP_8260.rslt\spectra.d
 Injection Date: 16-May-2015 10:50:30
 Spectrum: Tune Spec :Average 218-220(5.13-5.16) Bgrd 214(5.07)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 34

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	179	51.00	2306	74.00	5507	94.00	4109
37.00	1699	56.00	429	75.00	17288	95.00	34392
38.00	1738	57.00	1074	76.00	1500	96.00	2757
39.00	1124	61.00	1659	79.00	901	174.00	26688
40.00	37	62.00	1796	81.00	945	175.00	2031
44.00	281	63.00	1415	87.00	1437	176.00	26192
47.00	183	68.00	3628	88.00	1355	177.00	1704
49.00	1526	69.00	3404	92.00	911		
50.00	7748	73.00	1584	93.00	1429		

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4779.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 02-Jun-2015 11:21:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150602-35598.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 02-Jun-2015 21:55:49 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK012

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 4 BFB

95 5.126 5.126 0.000 0 177556

NR

NR

7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

MV-BFB_00017

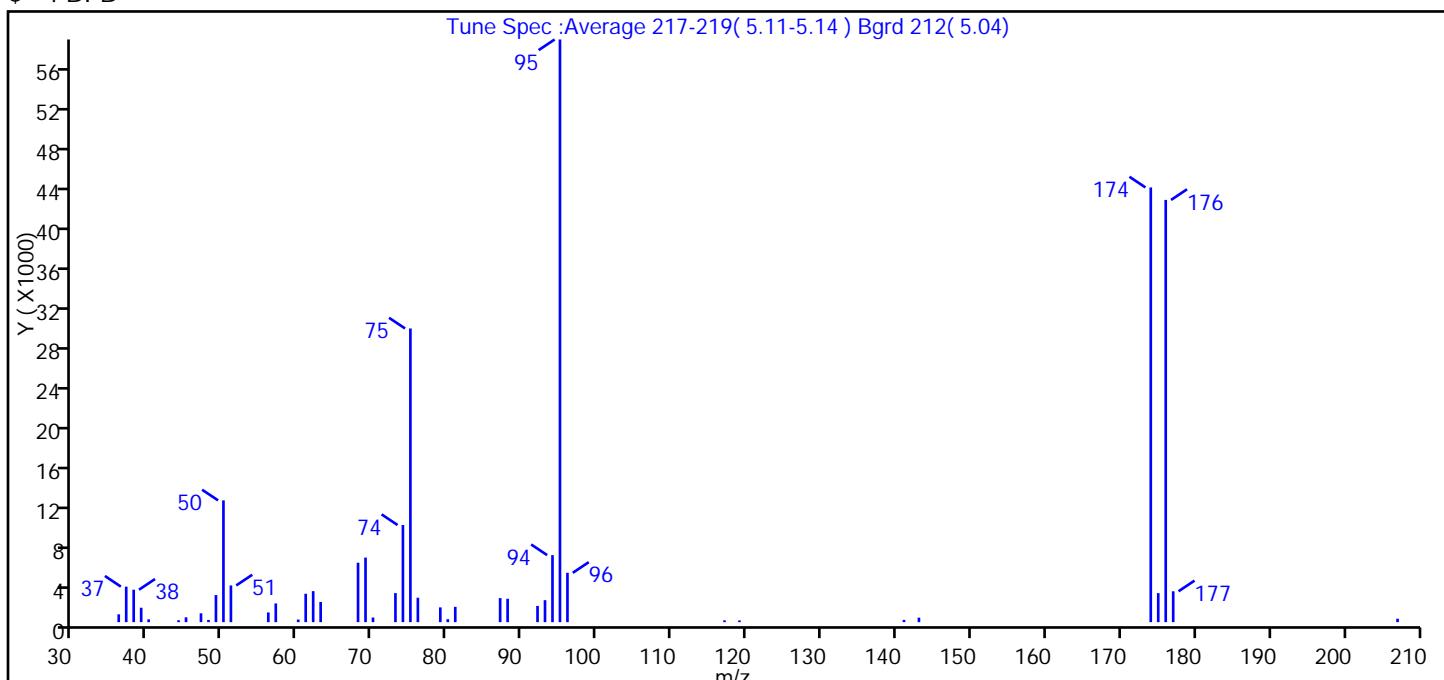
Amount Added: 1.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4779.D
 Injection Date: 02-Jun-2015 11:21:30 Instrument ID: VMS_P
 Lims ID: BFB
 Client ID:
 Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.9
75	30 to 60% of m/z 95	50.4
96	5 to 9% of m/z 95	8.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	74.6
175	5 to 9% of m/z 174	5.0 (6.7)
176	Greater than 95% but less than 101% of m/z 174	72.5 (97.1)
177	5 to 9% of m/z 176	5.3 (7.3)

Data File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4779.D\AQ_VMSP_8260.rslt\spectra.d
 Injection Date: 02-Jun-2015 11:21:30
 Spectrum: Tune Spec :Average 217-219(5.11-5.14) Bgrd 212(5.04)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 44

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	789	51.00	3709	74.00	9810	95.00	58856
37.00	3586	56.00	981	75.00	29664	96.00	4983
38.00	3277	57.00	1890	76.00	2467	117.00	181
39.00	1457	60.00	263	79.00	1490	119.00	172
40.00	282	61.00	2867	80.00	298	141.00	231
44.00	192	62.00	3133	81.00	1546	143.00	453
45.00	489	63.00	2039	87.00	2430	174.00	43912
47.00	893	68.00	6001	88.00	2361	175.00	2930
48.00	224	69.00	6520	92.00	1639	176.00	42648
49.00	2736	70.00	470	93.00	2219	177.00	3117
50.00	12299	73.00	2936	94.00	6770	207.00	346

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4809.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 02-Jun-2015 22:24:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: contrerase Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:35:55 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: contrerase Date: 03-Jun-2015 00:12:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 4 BFB

95 5.139 5.139 0.000 83 114589 NR NR 7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

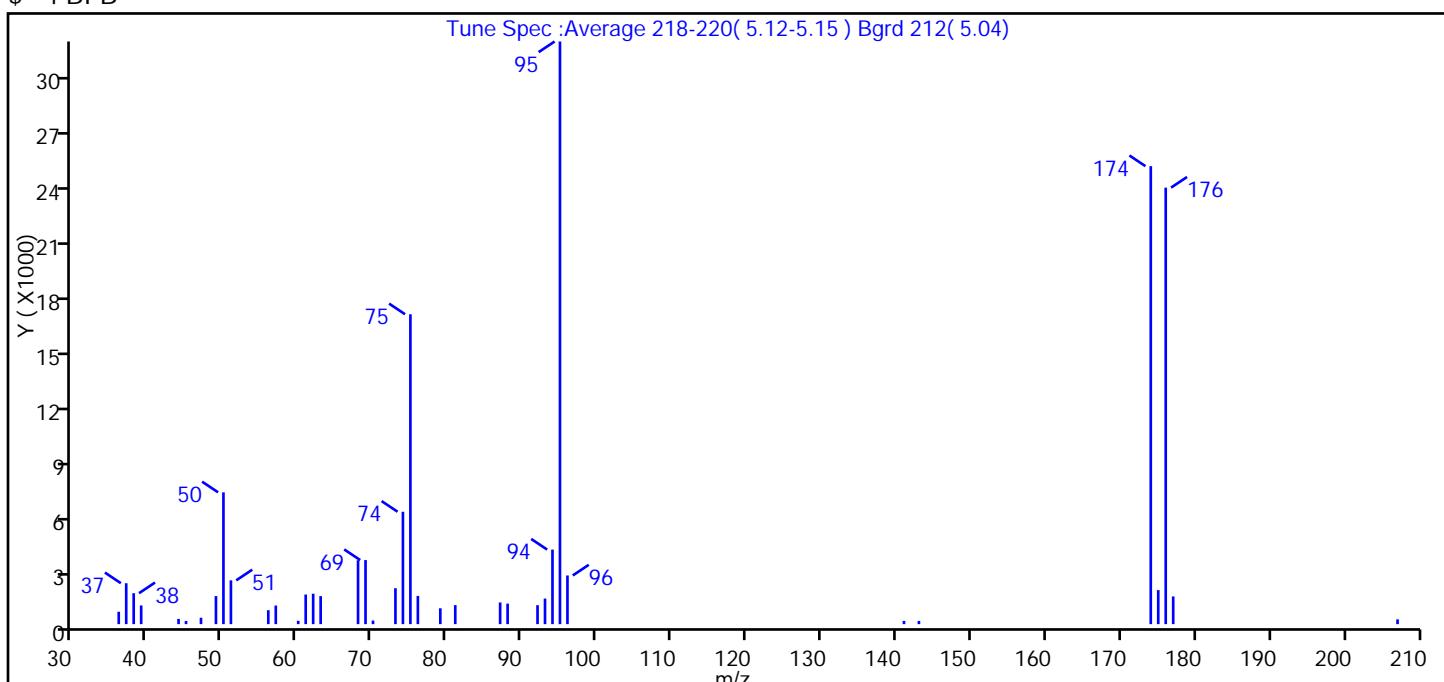
MV-BFB_00017

Amount Added: 1.00 Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4809.D
 Injection Date: 02-Jun-2015 22:24:30 Instrument ID: VMS_P
 Lims ID: BFB
 Client ID:
 Operator ID: contrerase ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
 Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.6
75	30 to 60% of m/z 95	53.2
96	5 to 9% of m/z 95	8.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	78.6
175	5 to 9% of m/z 174	5.8 (7.4)
176	Greater than 95% but less than 101% of m/z 174	74.9 (95.3)
177	5 to 9% of m/z 176	4.8 (6.3)

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4809.D\AQ_VMSP_8260.rslt\spectra.d
 Injection Date: 02-Jun-2015 22:24:30
 Spectrum: Tune Spec :Average 218-220(5.12-5.15) Bgrd 212(5.04)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 39

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	660	56.00	743	74.00	5986	95.00	31032
37.00	2180	57.00	991	75.00	16504	96.00	2593
38.00	1648	60.00	178	76.00	1502	141.00	174
39.00	996	61.00	1577	79.00	844	143.00	171
44.00	278	62.00	1620	81.00	1013	174.00	24392
45.00	168	63.00	1492	87.00	1155	175.00	1814
47.00	340	68.00	3404	88.00	1092	176.00	23248
49.00	1495	69.00	3412	92.00	1010	177.00	1475
50.00	7020	70.00	192	93.00	1362	207.00	254
51.00	2333	73.00	1914	94.00	3971		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 280-279458/6

Matrix: Water

Lab File ID: H3003.D

Analysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)

Date Analyzed: 05/28/2015 21:10

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 280-279458/6

Matrix: Water

Lab File ID: H3003.D

Analysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)

Date Analyzed: 05/28/2015 21:10

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.661	J	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.:
Client Sample ID: Lab Sample ID: MB 280-279458/6
Matrix: Water Lab File ID: H3003.D
Analysis Method: 8260B Date Collected:
Sample wt/vol: 20 (mL) Date Analyzed: 05/28/2015 21:10
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: DB-624 (75.53) ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 279458 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	98		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3003.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 28-May-2015 21:10:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: MB AF
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:53:21 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:54:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.993	3.970	0.023	97	212852	250.0	250.0	
* 2 Fluorobenzene	96	6.761	6.755	0.006	97	1139866	12.5	12.5	
* 3 1,4-Dioxane-d8	96		8.670					ND	
* 4 Chlorobenzene-d5	119	11.114	11.090	0.024	92	259345	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.126	14.102	0.024	98	410461	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.943	5.920	0.023	93	480972	8.50	8.35	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.361	6.337	0.024	83	257090	8.50	8.06	
\$ 10 Toluene-d8 (Surr)	98	8.885	8.862	0.023	95	1075421	8.50	8.50	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.768	12.744	0.024	81	604204	8.50	8.60	
\$ 152 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 7 BFB	95	2.357	2.475	-0.118	0	1152		NR	7
28 Dichlorodifluoromethane	85		2.159					ND	
27 Chlorotrifluoroethene	116		2.173					ND	
30 Chloromethane	50		2.246					ND	
29 1,2-Dichloro-1,1,2,2-tetra	85		2.329					ND	
31 Butadiene	54		2.368					ND	
32 Vinyl chloride	62		2.385					ND	
33 2-Chloro-1,1,1-Trifluoroet	118		2.521					ND	
34 Ethylene oxide	43		2.635					ND	
35 Bromomethane	94		2.681					ND	
36 Chloroethane	64		2.751					ND	
37 Dichlorofluoromethane	67		2.925					ND	
38 Trichlorofluoromethane	101		2.977					ND	
39 Ethanol	45		3.140					ND	
40 Ethyl ether	59		3.204					ND	
43 Propene oxide	58		3.297					ND	
41 1,2-Dichloro-1,1,2-trifluo	117		3.322					ND	
44 Acrolein	56		3.360					ND	
42 1,1,1-Trifluoro-2,2-dichlo	83		3.374					ND	
45 1,1-Dichloroethene	96		3.465					ND	
46 1,1,2-Trichloro-1,2,2-trif	151		3.482					ND	
47 Acetone	43		3.500					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
49 Isopropyl alcohol	45		3.628					ND	
48 Iodomethane	142		3.639					ND	
50 Carbon disulfide	76		3.709					ND	
51 Acetonitrile	41		3.802					ND	
52 3-Chloro-1-propene	41		3.813					ND	
53 Methyl acetate	43		3.813					ND	
54 Methylene Chloride	84	3.958	3.935	0.023	98	32661		0.6612	
55 2-Methyl-2-propanol	59		4.057					ND	
57 Acrylonitrile	53		4.196					ND	
58 trans-1,2-Dichloroethene	96		4.231					ND	
56 Methyl tert-butyl ether	73		4.231					ND	
59 Hexane	57		4.492					ND	
60 1,1-Dichloroethane	63		4.684					ND	
61 Vinyl acetate	43		4.701					ND	
62 Isopropyl ether	87		4.759					ND	
63 2-Chloro-1,3-butadiene	53		4.794					ND	
64 Tert-butyl ethyl ether	59		5.177					ND	
67 2-Butanone (MEK)	43		5.345					ND	
66 2,2-Dichloropropane	77		5.363					ND	
65 cis-1,2-Dichloroethene	96		5.363					ND	
69 Ethyl acetate	43		5.421					ND	
70 Propionitrile	54		5.456					ND	
71 sec-Butyl Alcohol	45		5.571					ND	
72 Methacrylonitrile	41		5.612					ND	
73 Chlorobromomethane	128		5.641					ND	
74 Tetrahydrofuran	42		5.711					ND	
75 Chloroform	83		5.711					ND	
76 1,1,1-Trichloroethane	97		5.972					ND	
77 Cyclohexane	56		6.042					ND	
78 1,1-Dichloropropene	75		6.146					ND	
79 Carbon tetrachloride	117		6.181					ND	
80 Isobutyl alcohol	41		6.285					ND	
81 Benzene	78		6.407					ND	
82 1,2-Dichloroethane	62		6.425					ND	
83 Tert-amyl methyl ether	73		6.552					ND	
84 n-Heptane	43		6.703					ND	
85 n-Butanol	56		7.144					ND	
86 Trichloroethene	95		7.225					ND	
87 Ethyl acrylate	55	7.371	7.353	0.018	0	316		NC	
88 2-Pentanone	43		7.452					ND	
89 Methylcyclohexane	55		7.486					ND	
90 1,2-Dichloropropane	63		7.521					ND	
91 Methyl methacrylate	100		7.667					ND	
92 Dibromomethane	93		7.678					ND	
93 1,4-Dioxane	88		7.695					ND	
94 Dichlorobromomethane	83		7.887					ND	
95 2-Nitropropane	41		8.206					ND	
96 2-Chloroethyl vinyl ether	63		8.287					ND	
97 cis-1,3-Dichloropropene	75		8.479					ND	
98 4-Methyl-2-pentanone (MIBK)	43		8.705					ND	
99 Toluene	91		8.966					ND	
100 trans-1,3-Dichloropropene	75		9.280					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 Ethyl methacrylate	69		9.402						ND
102 1,1,2-Trichloroethane	97		9.541						ND
103 Tetrachloroethene	164		9.750						ND
104 1,3-Dichloropropane	76		9.785						ND
105 2-Hexanone	43		9.906						ND
108 Chlorodibromomethane	129		10.133						ND
107 Tetrahydrothiophene	60		10.139						ND
106 n-Butyl acetate	43	10.208	10.226	-0.018	0	470			NC
109 Ethylene Dibromide	107		10.324						ND
110 1-Chlorohexane	91		11.108						ND
111 Chlorobenzene	112		11.143						ND
112 1,1,2-Tetrachloroethane	131		11.282						ND
113 Ethylbenzene	106		11.317						ND
114 m-Xylene & p-Xylene	106		11.491						ND
115 o-Xylene	106		12.065						ND
116 Styrene	104		12.083						ND
117 Bromoform	173		12.344						ND
118 Isopropylbenzene	105		12.553						ND
119 cis-1,4-Dichloro-2-butene	53		12.663						ND
120 Cyclohexanone	55		12.675						ND
122 Bromobenzene	156		12.936						ND
121 1,1,2,2-Tetrachloroethane	83		12.936						ND
123 1,2,3-Trichloropropane	110		12.988						ND
124 trans-1,4-Dichloro-2-buten	53		13.005						ND
125 N-Propylbenzene	120		13.075						ND
126 2-Chlorotoluene	126		13.179						ND
127 1,3,5-Trimethylbenzene	105		13.284						ND
128 4-Chlorotoluene	126		13.301						ND
129 tert-Butylbenzene	119		13.667						ND
130 1,2,4-Trimethylbenzene	105		13.719						ND
22 Pentachloroethane	167		13.721						ND
131 sec-Butylbenzene	134		13.911						ND
132 1,3-Dichlorobenzene	146		14.032						ND
133 4-Isopropyltoluene	119		14.067						ND
134 1,4-Dichlorobenzene	146		14.137						ND
135 1,2,3-Trimethylbenzene	105		14.195						ND
136 Benzyl chloride	126		14.352						ND
137 n-Butylbenzene	91		14.503						ND
138 1,2-Dichlorobenzene	146		14.520						ND
139 1,2-Dibromo-3-Chloropropan	157		15.303						ND
140 1,3,5-Trichlorobenzene	180		15.518						ND
144 1,2,3-Trichlorobenzene	180		16.069						ND
142 Hexachlorobutadiene	225		16.226						ND
143 Naphthalene	128		16.296						ND
141 1,2,4-Trichlorobenzene	180		16.522						ND
20 2-Methylnaphthalene	142		0.000						ND
18 2,2-Dimethylpentane	1		0.000						ND
158 Dicyclopentadiene	1		0.000						ND
15 Dimethyl disulfide	1		0.000						ND
14 2-Butoxyethanol TIC	1		0.000						ND
23 2-Methylhexane	1		0.000						ND
24 3-Methylhexane	1		0.000						ND

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 2,3-Dimethylpentane	1		0.000					ND	
21 2,4-Dimethylpentane	1		0.000					ND	
159 4-Ethyltoluene	1		0.000					ND	
16 3,3-Dimethylpentane	1		0.000					ND	
17 2,2,3-Trimethylbutane	1		0.000					ND	
12 3-Ethylpentane	1		0.000					ND	
13 n-Nonyl Aldehyde	1		0.000					ND	
157 Propene	1		0.000					ND	
S 151 1,2-Dichloroethene, Total	96		2.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	
S 146 Xylenes, Total (URS)	1		0.000					ND	
S 147 Total BTEX	1		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	
S 149 1,2-Dichloroethene, Total	1		0.000					ND	
S 150 Xylenes, Total	106		0.000					ND	
S 160 TAH	1				0			0	
T 25 Dichloroacetonitrile TIC	74		1.000					ND	
T 26 2,3-dichloro-1-propene TIC	75		1.000					ND	
T 68 Propene oxide TIC	58		5.334					ND	
T 153 Propene TIC	1		0.000					ND	
T 155 4-Ethyltoluene TIC	1		0.000					ND	
T 154 Dicyclopentadiene TIC	1		0.000					ND	
T 156 1,3-Butadiene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:54:04

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3003.D

Injection Date: 28-May-2015 21:10:30

Instrument ID: VMS_H

Operator ID: bergerb

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

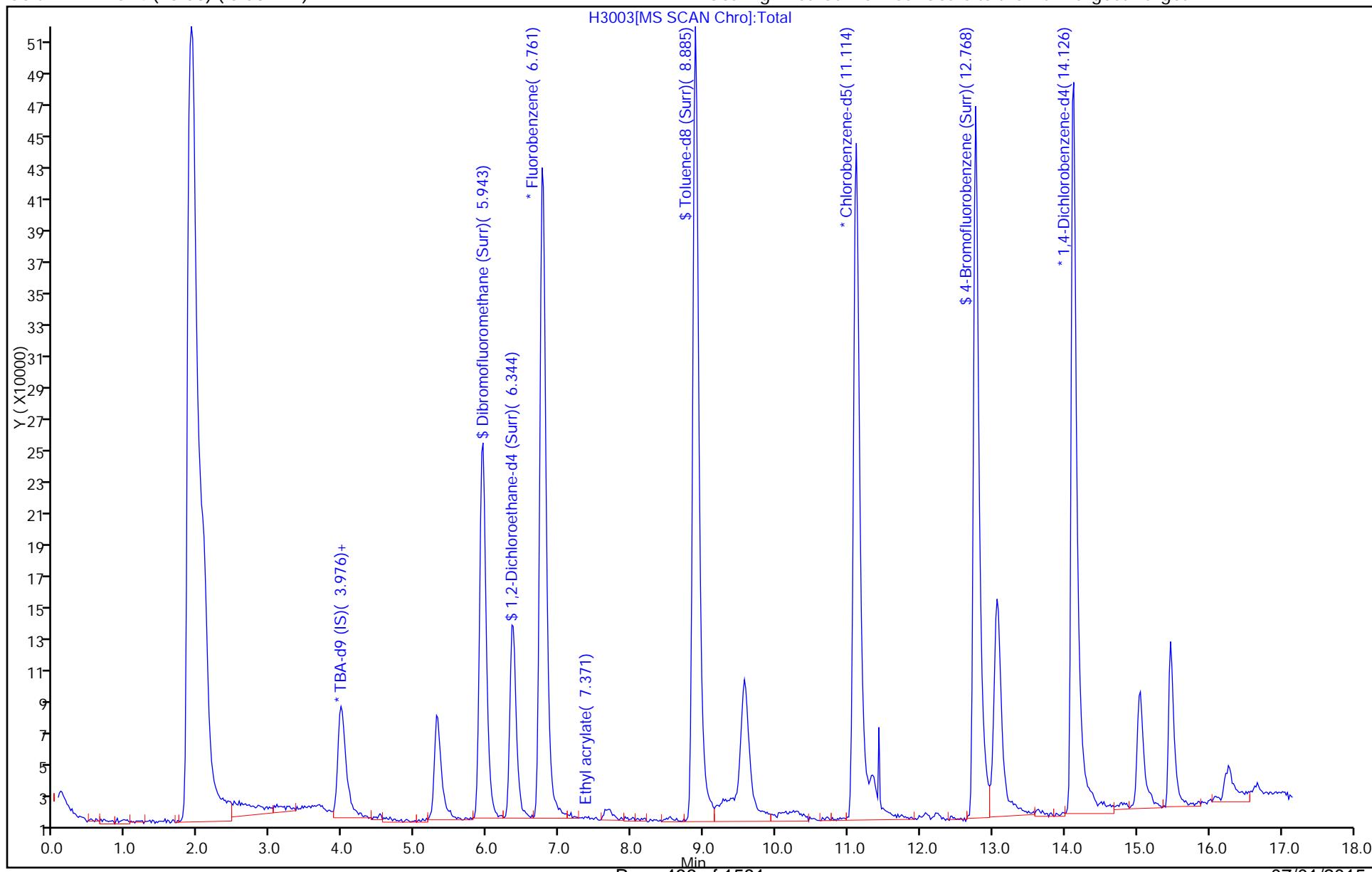
ALS Bottle#: 6

Method: AQ_VMSH_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm)

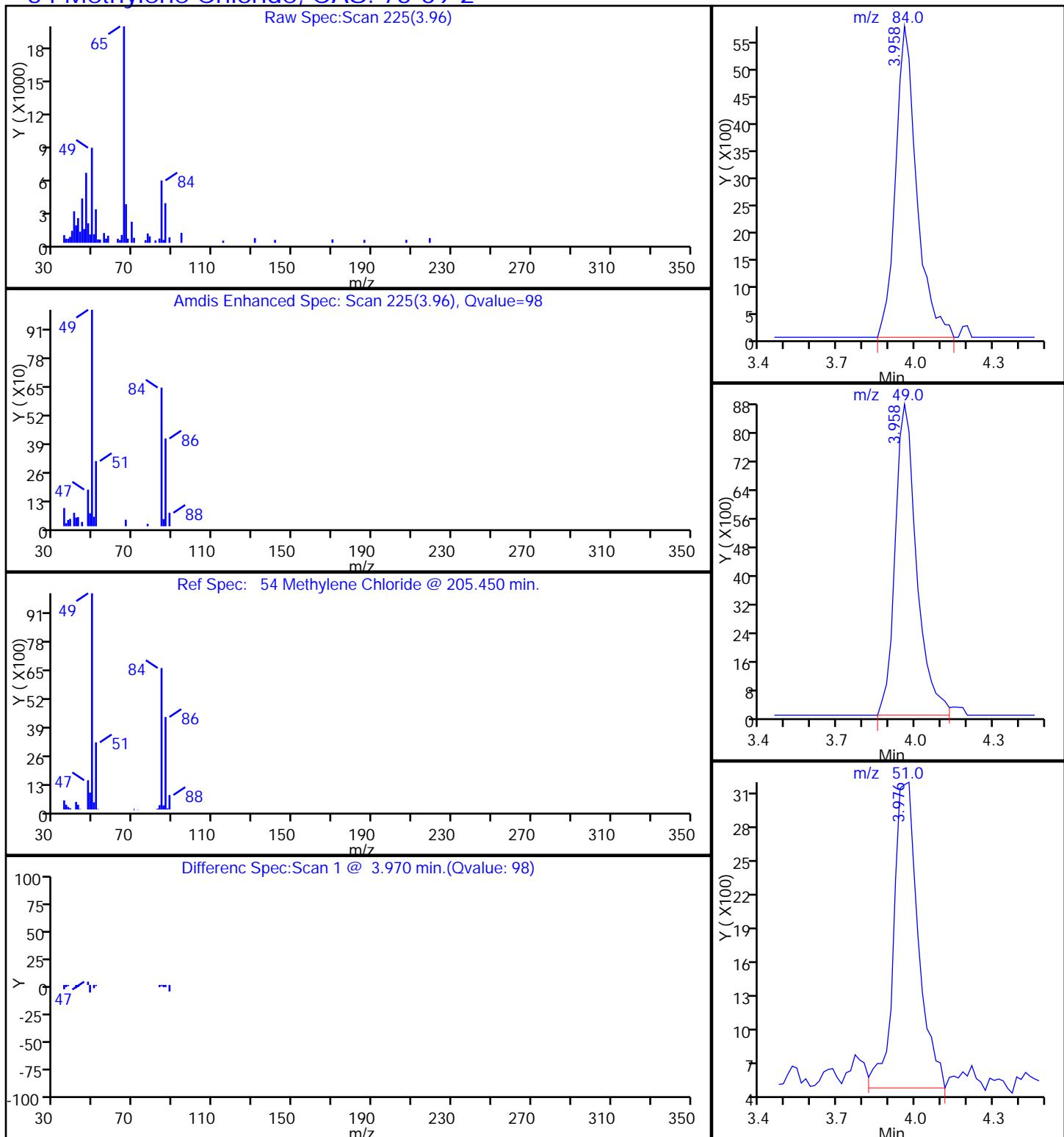
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3003.D
 Injection Date: 28-May-2015 21:10:30 Instrument ID: VMS_H
 Lims ID: MB
 Client ID:
 Operator ID: bergerb ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Method: AQ_VMSH_8260 Limit Group: MSV - 8260B Water and Solid
 Column: DB-624 (75.53) (0.53 mm) Detector: MS SCAN

54 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LB 280-278801/1-A
Matrix: Solid (TCLP) Lab File ID: P4813.D
Analysis Method: 8260B Date Collected: _____
Sample wt/vol: 20 (mL) Date Analyzed: 06/02/2015 23:41
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 280068 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-35-4	1,1-Dichloroethene	0.00080	U	0.0010	0.00080	0.00023
107-06-2	1,2-Dichloroethane	0.00040	U	0.0010	0.00040	0.00013
78-93-3	2-Butanone (MEK)	0.0040	U	0.010	0.0040	0.0018
71-43-2	Benzene	0.00040	U	0.0010	0.00040	0.00016
56-23-5	Carbon tetrachloride	0.00040	U	0.0010	0.00040	0.00019
108-90-7	Chlorobenzene	0.00040	U	0.0010	0.00040	0.00017
67-66-3	Chloroform	0.00040	U	0.0010	0.00040	0.00016
127-18-4	Tetrachloroethene	0.00040	U	0.0010	0.00040	0.00020
79-01-6	Trichloroethene	0.00040	U	0.0010	0.00040	0.00016
75-01-4	Vinyl chloride	0.00020	U	0.0010	0.00020	0.00010

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-129
460-00-4	4-Bromofluorobenzene (Surr)	95		78-121
1868-53-7	Dibromofluoromethane (Surr)	107		79-119
2037-26-5	Toluene-d8 (Surr)	105		78-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4813.D
 Lims ID: LB 280-278801/1-A
 Client ID:
 Sample Type: LB
 Inject. Date: 02-Jun-2015 23:41:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: LB 280-278801/1-A
 Operator ID: contrerase Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 10:55:30 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: contrerase Date: 03-Jun-2015 00:11:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.793	5.800	-0.007	93	168117	250.0	250.0	
* 1 Fluorobenzene	96	7.766	7.774	-0.008	98	1437413	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.026	0.000	90	330351	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.871	0.000	98	471457	12.5	12.5	
* 149 1,4-Dioxane-d8	96	0.000						ND	
\$ 5 Dibromofluoromethane (Surr)	111	7.223	7.223	0.000	92	401034	12.0	12.9	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.523	7.524	-0.001	99	385889	12.0	12.9	
\$ 7 Toluene-d8 (Surr)	98	8.946	8.946	0.000	95	1709036	12.0	12.5	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.898	10.898	0.000	86	504235	12.0	11.4	
\$ 151 Trifluorotoluene (Surr)	1	0.000						ND	
\$ 4 BFB	95	5.139						ND	
22 Chlorotrifluoroethene	116	3.958						ND	
23 Dichlorodifluoromethane	85	4.001						ND	
24 1,2-Dichloro-1,1,2,2-tetra	85	4.182						ND	
26 Chloromethane	50	4.239						ND	
27 Vinyl chloride	62	4.378						ND	
25 2-Chloro-1,1,1-Trifluoroet	118	4.461						ND	
28 Ethylene oxide	43	4.726						ND	
29 Bromomethane	94	4.756						ND	
30 Chloroethane	64	4.825						ND	
31 Dichlorofluoromethane	67	4.993						ND	
32 Trichlorofluoromethane	101	5.091						ND	
33 Ethanol	45	5.117						ND	
35 Ethyl ether	59	5.244						ND	
36 1,2-Dichloro-1,1,2-trifluo	117	5.271						ND	
37 1,1,1-Trifluoro-2,2-dichlo	83	5.299						ND	
38 Propene oxide	58	5.369						ND	
39 Acrolein	56	5.412						ND	
40 1,1,2-Trichloro-1,2,2-trif	151	5.496						ND	
41 Acetone	43	5.522						ND	
42 Isopropyl alcohol	45	5.543						ND	
43 1,1-Dichloroethene	96	5.551						ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Iodomethane	142		5.730					ND	
45 Methyl acetate	43	5.750	5.751	-0.001	99	1365625		123.6	
46 Acetonitrile	41		5.779					ND	
47 3-Chloro-1-propene	41		5.801					ND	
48 Carbon disulfide	76		5.844					ND	
49 2-Methyl-2-propanol	59		5.858					ND	
50 Methylene Chloride	84	5.900	5.908	-0.008	97	28200		0.1743	
52 Acrylonitrile	53		6.066					ND	
51 Methyl tert-butyl ether	73		6.066					ND	
53 trans-1,2-Dichloroethene	96		6.116					ND	
54 Hexane	57		6.273					ND	
55 Vinyl acetate	43		6.380					ND	
56 Isopropyl ether	87		6.387					ND	
57 1,1-Dichloroethane	63		6.445					ND	
58 2-Chloro-1,3-butadiene	53		6.515					ND	
59 Tert-butyl ethyl ether	59		6.666					ND	
60 Ethyl acetate	43		6.823					ND	
61 2-Butanone (MEK)	43		6.838					ND	
62 sec-Butyl Alcohol	45		6.881					ND	
63 cis-1,2-Dichloroethene	96		6.881					ND	
65 Propionitrile	54		6.909					ND	
64 2,2-Dichloropropane	77		6.909					ND	
66 Methacrylonitrile	41		7.030					ND	
67 Chlorobromomethane	128		7.088					ND	
68 Chloroform	83		7.095					ND	
69 Tetrahydrofuran	42		7.117					ND	
70 Isobutyl alcohol	41		7.303					ND	
71 1,1,1-Trichloroethane	97		7.303					ND	
72 Cyclohexane	56		7.374					ND	
73 1,1-Dichloropropene	75		7.410					ND	
74 Carbon tetrachloride	117		7.446					ND	
75 Tert-amyl methyl ether	73		7.574					ND	
76 1,2-Dichloroethane	62		7.581					ND	
77 Benzene	78		7.596					ND	
14 n-Heptane	43		7.653					ND	
78 n-Butanol	56		7.802					ND	
79 Trichloroethene	95		8.053					ND	
80 2-Pentanone	43		8.103					ND	
81 Methyl methacrylate	100		8.189					ND	
82 Methylcyclohexane	55		8.232					ND	
83 1,2-Dichloropropane	63		8.246					ND	
84 1,4-Dioxane	88		8.304					ND	
85 Dibromomethane	93		8.347					ND	
86 Dichlorobromomethane	83		8.418					ND	
87 2-Chloroethyl vinyl ether	63		8.554					ND	
88 2-Nitropropane	41		8.567					ND	
89 cis-1,3-Dichloropropene	75		8.726					ND	
90 4-Methyl-2-pentanone (MIBK)	43		8.783					ND	
91 Toluene	91		8.997					ND	
92 Ethyl methacrylate	69		9.076					ND	
93 trans-1,3-Dichloropropene	75		9.097					ND	
94 1,1,2-Trichloroethane	97		9.262					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 2-Hexanone	43		9.369						ND
96 1,3-Dichloropropane	76		9.398						ND
97 Tetrachloroethene	164		9.405						ND
98 Chlorodibromomethane	129		9.591						ND
99 Tetrahydrothiophene	60		9.633						ND
100 Ethylene Dibromide	107		9.719						ND
101 1-Chlorohexane	91		9.927						ND
102 Chlorobenzene	112		10.048						ND
103 Ethylbenzene	106		10.077						ND
104 1,1,1,2-Tetrachloroethane	131		10.084						ND
105 m-Xylene & p-Xylene	106		10.156						ND
107 o-Xylene	106		10.477						ND
106 Styrene	104		10.477						ND
108 Bromoform	173		10.692						ND
109 Isopropylbenzene	105		10.735						ND
110 cis-1,4-Dichloro-2-butene	53		10.777						ND
111 Cyclohexanone	55		10.885						ND
112 1,1,2,2-Tetrachloroethane	83		10.956						ND
113 trans-1,4-Dichloro-2-buten	53		10.992						ND
114 1,2,3-Trichloropropane	110		11.028						ND
115 N-Propylbenzene	120		11.056						ND
116 Bromobenzene	156		11.071						ND
117 1,3,5-Trimethylbenzene	105		11.164						ND
118 2-Chlorotoluene	126		11.185						ND
119 4-Chlorotoluene	126		11.264						ND
120 tert-Butylbenzene	119		11.471						ND
121 1,2,4-Trimethylbenzene	105		11.500						ND
122 sec-Butylbenzene	134		11.650						ND
123 4-Isopropyltoluene	119		11.743						ND
124 1,3-Dichlorobenzene	146		11.829						ND
125 1,2,3-Trimethylbenzene	105		11.892						ND
126 1,4-Dichlorobenzene	146		11.893						ND
127 n-Butylbenzene	91		12.115						ND
128 1,2-Dichlorobenzene	146		12.265						ND
129 1,2-Dibromo-3-Chloropropan	157		13.044						ND
16 1,3,5-Trichlorobenzene	180		13.244						ND
130 1,2,4-Trichlorobenzene	180		14.009						ND
131 Hexachlorobutadiene	225		14.152						ND
132 Naphthalene	128		14.396						ND
133 1,2,3-Trichlorobenzene	180		14.732						ND
13 2,2-Dimethylpentane	1		0.000						ND
15 Dimethyl disulfide	1		0.000						ND
17 3-Ethylpentane	1		0.000						ND
10 n-Nonyl Aldehyde	1		0.000						ND
12 2,2,3-Trimethylbutane	1		0.000						ND
143 Pentachloroethane	167		0.000						ND
11 2,3-Dimethylpentane	1		0.000						ND
20 2-Methylhexane	1		0.000						ND
19 3-Methylhexane	1		0.000						ND
18 3,3-Dimethylpentane	1		0.000						ND
9 2,4-Dimethylpentane	1		0.000						ND
21 2-Butoxyethanol TIC	1		0.000						ND

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Propene oxide TIC	58		5.334					ND	
S 140 1,2-Dichloroethene, Total	96		2.000					ND	
S 138 1,2-Dichloroethene, Total	1		0.000					ND	
S 139 Xylenes, Total	106		0.000					ND	
S 152 TAH	1				0			0	
S 137 1,3-Dichloropropene, Total	1		0.000					ND	
S 134 Trihalomethanes, Total	1		0.000					ND	
S 135 Xylenes, Total (URS)	1		0.000					ND	
S 136 Total BTEX	1		0.000					ND	
T 142 2,3-dichloro-1-propene TIC	75		1.000					ND	
T 141 Dichloroacetonitrile TIC	74		1.000					ND	
T 156 1,3-Butadiene TIC	1		0.000					ND	
T 153 Propene TIC	1		0.000					ND	
T 154 Dicyclopentadiene TIC	1		0.000					ND	
T 155 4-Ethyltoluene TIC	1		0.000					ND	

Reagents:

MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Report Date: 03-Jun-2015 10:55:31

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4813.D

Injection Date: 02-Jun-2015 23:41:30

Instrument ID: VMS_P

Lims ID: LB 280-278801/1-A

Operator ID: contrerase

Client ID:

Worklist Smp#: 13

Purge Vol: 20.000 mL

Dil. Factor: 1.0000

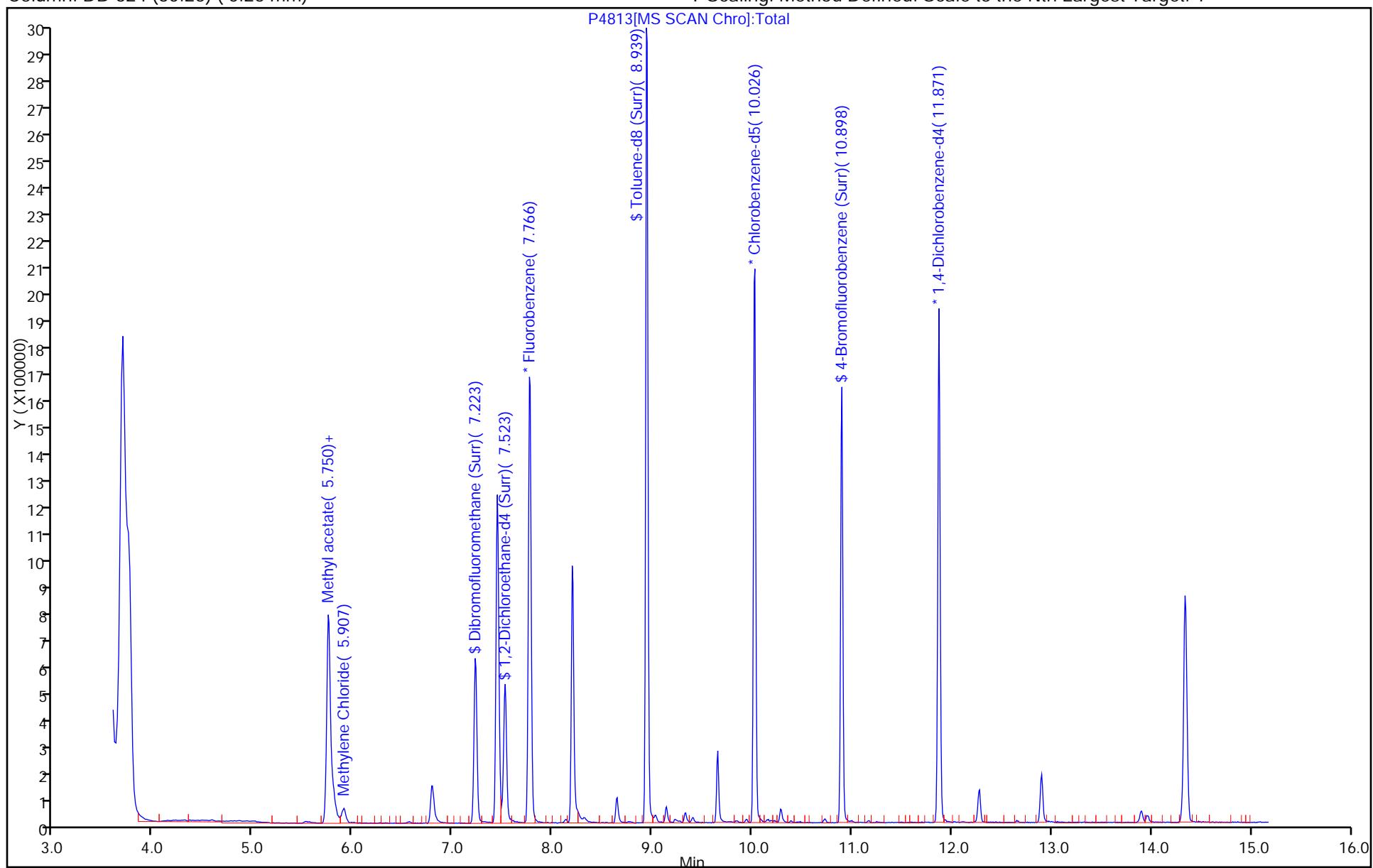
ALS Bottle#: 13

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: LCS 280-279458/4

Matrix: Water

Lab File ID: H3001.D

Analysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)

Date Analyzed: 05/28/2015 20:25

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	5.08		1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	4.84		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	4.78		1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	4.98		1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	4.83		1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	4.75		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	4.98		1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	5.19		1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	4.77		3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	5.11		1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	4.72		1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	5.13		5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	5.07		1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	5.01		1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	4.89		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	4.80		1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	4.81		1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	4.58		1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	4.84		1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	5.17		1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	4.78		1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	21.0		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	4.74		1.0	0.40	0.17
591-78-6	2-Hexanone	20.9		5.0	4.0	1.4
106-43-4	4-Chlorotoluene	4.93		1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	21.6		5.0	3.2	1.0
67-64-1	Acetone	18.1		10	6.4	1.9
71-43-2	Benzene	5.00		1.0	0.40	0.16
108-86-1	Bromobenzene	4.86		1.0	0.40	0.17
74-97-5	Bromochloromethane	4.96		1.0	0.20	0.10
75-27-4	Bromodichloromethane	4.89		1.0	0.40	0.17
75-25-2	Bromoform	5.18		1.0	0.40	0.19
74-83-9	Bromomethane	5.40		2.0	0.80	0.21
75-15-0	Carbon disulfide	4.62		2.0	1.6	0.45
56-23-5	Carbon tetrachloride	4.83		2.0	0.40	0.19
108-90-7	Chlorobenzene	5.02		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: LCS 280-279458/4

Matrix: Water

Lab File ID: H3001.D

Analysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)

Date Analyzed: 05/28/2015 20:25

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (75.53) ID: 0.53 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 279458

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	5.15		1.0	0.40	0.17
75-00-3	Chloroethane	5.36		2.0	1.6	0.41
67-66-3	Chloroform	4.88		1.0	0.40	0.16
74-87-3	Chloromethane	5.32		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	4.80		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	5.19		1.0	0.40	0.16
74-95-3	Dibromomethane	4.73		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	5.86		2.0	0.80	0.31
100-41-4	Ethylbenzene	4.91		1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	4.97		1.0	0.80	0.36
98-82-8	Isopropylbenzene	4.83		1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	5.03		5.0	0.80	0.25
75-09-2	Methylene Chloride	5.93		5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	5.11		2.0	0.80	0.34
91-20-3	Naphthalene	5.09		1.0	0.80	0.22
104-51-8	n-Butylbenzene	4.76		1.0	0.80	0.32
103-65-1	N-Propylbenzene	4.79		1.0	0.40	0.16
95-47-6	o-Xylene	4.95		1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	4.92		1.0	0.40	0.17
135-98-8	sec-Butylbenzene	4.73		1.0	0.40	0.17
100-42-5	Styrene	4.91		1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	54.5		50	32	11
98-06-6	tert-Butylbenzene	4.75		1.0	0.40	0.16
127-18-4	Tetrachloroethene	5.00		1.0	0.40	0.20
108-88-3	Toluene	4.90		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	4.84		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	5.20		1.0	0.40	0.19
79-01-6	Trichloroethene	5.05		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	5.50		2.0	0.80	0.29
75-01-4	Vinyl chloride	5.41		1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.:
Client Sample ID: Lab Sample ID: LCS 280-279458/4
Matrix: Water Lab File ID: H3001.D
Analysis Method: 8260B Date Collected:
Sample wt/vol: 20 (mL) Date Analyzed: 05/28/2015 20:25
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: DB-624 (75.53) ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 279458 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		81-118
460-00-4	4-Bromofluorobenzene (Surr)	102		85-114
1868-53-7	Dibromofluoromethane (Surr)	96		80-119
2037-26-5	Toluene-d8 (Surr)	104		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3001.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-May-2015 20:25:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: bergerb Instrument ID: VMS_H
 Method: \\Denchrom\ChromData\VMS_H\20150528-35487.b\AQ_VMSH_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 29-May-2015 17:53:21 Calib Date: 28-May-2015 05:10:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_H\20150528-35452.b\H2962.D
 Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: bergerb Date: 29-May-2015 17:54:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.987	3.970	0.017	98	208047	250.0	250.0	
* 2 Fluorobenzene	96	6.755	6.755	0.000	96	1178561	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.108	11.090	0.018	91	258327	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.119	14.102	0.017	97	436380	12.5	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.937	5.920	0.017	93	487618	8.50	8.19	
\$ 9 1,2-Dichloroethane-d4 (Sur)	65	6.355	6.337	0.018	83	270851	8.50	8.21	
\$ 10 Toluene-d8 (Surr)	98	8.879	8.862	0.017	95	1112380	8.50	8.83	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.762	12.744	0.018	81	645267	8.50	8.64	
28 Dichlorodifluoromethane	85	2.159	2.159	0.000	98	330554	5.00	5.86	
30 Chloromethane	50	2.264	2.246	0.018	99	195364	5.00	5.32	
31 Butadiene	54	2.385	2.368	0.017	0	155267	NC	NC	
32 Vinyl chloride	62	2.385	2.385	0.000	98	194122	5.00	5.41	
35 Bromomethane	94	2.681	2.681	0.000	90	160946	5.00	5.40	
36 Chloroethane	64	2.751	2.751	0.000	100	116841	5.00	5.36	
37 Dichlorofluoromethane	67	2.925	2.925	0.000	98	436689	5.00	5.52	
38 Trichlorofluoromethane	101	2.995	2.977	0.018	99	389367	5.00	5.50	
40 Ethyl ether	59	3.221	3.204	0.017	95	95871	5.00	5.13	
44 Acrolein	56	3.378	3.360	0.018	98	40583	50.0	31.5	
45 1,1-Dichloroethene	96	3.482	3.465	0.017	95	167196	5.00	4.75	
46 1,1,2-Trichloro-1,2,2-trif	151	3.500	3.482	0.018	97	225048	5.00	4.69	
47 Acetone	43	3.517	3.500	0.017	39	66238	20.0	18.1	
48 Iodomethane	142	3.656	3.639	0.017	99	392591	5.00	4.96	
50 Carbon disulfide	76	3.726	3.709	0.017	100	627485	5.00	4.62	
52 3-Chloro-1-propene	41	3.830	3.813	0.017	93	373440	5.00	4.57	
53 Methyl acetate	43	3.830	3.813	0.017	98	283629	25.0	23.9	
54 Methylene Chloride	84	3.952	3.935	0.017	98	190826	5.00	5.93	
55 2-Methyl-2-propanol	59	4.074	4.057	0.017	91	57119	50.0	54.5	
57 Acrylonitrile	53	4.213	4.196	0.017	98	148563	50.0	48.4	
58 trans-1,2-Dichloroethene	96	4.248	4.231	0.017	94	191502	5.00	4.84	
56 Methyl tert-butyl ether	73	4.248	4.231	0.017	91	337542	5.00	5.03	
59 Hexane	57	4.509	4.492	0.017	95	341829	5.00	4.93	
60 1,1-Dichloroethane	63	4.701	4.684	0.017	96	403577	5.00	4.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 Vinyl acetate	43	4.718	4.701	0.017	96	467601	10.0	9.03	
67 2-Butanone (MEK)	43	5.362	5.345	0.017	51	141952	20.0	21.0	
66 2,2-Dichloropropane	77	5.380	5.363	0.017	91	383365	5.00	4.78	
65 cis-1,2-Dichloroethene	96	5.362	5.363	-0.001	88	191435	5.00	4.80	
71 sec-Butyl Alcohol	45	5.589	5.571	0.018	96	207134	150.0	139.1	
73 Chlorobromomethane	128	5.641	5.641	0.000	90	86871	5.00	4.96	
74 Tetrahydrofuran	42	5.711	5.711	0.000	41	47509	10.0	9.76	
75 Chloroform	83	5.728	5.711	0.017	95	380880	5.00	4.88	
76 1,1,1-Trichloroethane	97	5.989	5.972	0.017	96	361202	5.00	4.84	
77 Cyclohexane	56	6.059	6.042	0.017	97	390836	5.00	4.75	
78 1,1-Dichloropropene	75	6.163	6.146	0.017	92	332828	5.00	4.98	
79 Carbon tetrachloride	117	6.181	6.181	0.000	99	334999	5.00	4.83	
80 Isobutyl alcohol	41	6.303	6.285	0.018	91	64724	125.0	124.1	
81 Benzene	78	6.424	6.407	0.017	98	617242	5.00	5.00	
82 1,2-Dichloroethane	62	6.442	6.425	0.018	96	182447	5.00	4.89	
84 n-Heptane	43	6.720	6.703	0.017	97	533009	5.00	4.88	
86 Trichloroethene	95	7.243	7.225	0.018	96	253600	5.00	5.05	
88 2-Pentanone	43	7.469	7.452	0.017	84	357692	20.0	19.1	
89 Methylcyclohexane	55	7.504	7.486	0.018	92	358919	5.00	4.90	
90 1,2-Dichloropropane	63	7.539	7.521	0.018	95	236721	5.00	4.80	
92 Dibromomethane	93	7.695	7.678	0.017	92	116301	5.00	4.73	
93 1,4-Dioxane	88	7.748	7.695	0.053	30	10918	100.0	85.7	
94 Dichlorobromomethane	83	7.904	7.887	0.017	98	351106	5.00	4.89	
96 2-Chloroethyl vinyl ether	63	8.287	8.287	0.000	89	35502	5.00	4.03	
97 cis-1,3-Dichloropropene	75	8.496	8.479	0.017	91	316154	5.00	5.19	
98 4-Methyl-2-pentanone (MIBK)	43	8.723	8.705	0.018	96	540426	20.0	21.6	
99 Toluene	91	8.966	8.966	0.000	97	693166	5.00	4.90	
100 trans-1,3-Dichloropropene	75	9.280	9.280	0.000	98	235004	5.00	5.20	
101 Ethyl methacrylate	69	9.419	9.402	0.017	97	200801	5.00	5.37	
102 1,1,2-Trichloroethane	97	9.558	9.541	0.017	84	141164	5.00	4.98	
103 Tetrachloroethene	164	9.767	9.750	0.017	95	210005	5.00	5.00	
104 1,3-Dichloropropane	76	9.802	9.785	0.017	95	229422	5.00	4.84	
105 2-Hexanone	43	9.924	9.906	0.018	97	354651	20.0	20.9	
108 Chlorodibromomethane	129	10.150	10.133	0.017	90	237281	5.00	5.15	
109 Ethylene Dibromide	107	10.342	10.324	0.018	98	164765	5.00	5.07	
110 1-Chlorohexane	91	11.125	11.108	0.017	89	351923	5.00	4.96	
111 Chlorobenzene	112	11.160	11.143	0.018	89	464643	5.00	5.02	
112 1,1,2-Tetrachloroethane	131	11.282	11.282	0.000	92	227446	5.00	5.08	
113 Ethylbenzene	106	11.334	11.317	0.017	99	231971	5.00	4.91	
114 m-Xylene & p-Xylene	106	11.508	11.491	0.017	98	328239	5.00	5.11	
115 o-Xylene	106	12.083	12.065	0.018	99	278572	5.00	4.95	
116 Styrene	104	12.100	12.083	0.017	94	447196	5.00	4.91	
117 Bromoform	173	12.344	12.344	0.000	94	128788	5.00	5.18	
118 Isopropylbenzene	105	12.570	12.553	0.017	97	902253	5.00	4.83	
120 Cyclohexanone	55	12.692	12.675	0.017	98	114396	200.0	201.0	
122 Bromobenzene	156	12.953	12.936	0.017	94	209396	5.00	4.86	
121 1,1,2,2-Tetrachloroethane	83	12.953	12.936	0.017	95	186156	5.00	4.78	
123 1,2,3-Trichloropropane	110	13.005	12.988	0.017	79	43445	5.00	4.77	
124 trans-1,4-Dichloro-2-butene	53	13.023	13.005	0.018	68	47596	5.00	4.66	
125 N-Propylbenzene	120	13.092	13.075	0.017	99	219391	5.00	4.79	
126 2-Chlorotoluene	126	13.179	13.179	0.000	97	168212	5.00	4.74	
127 1,3,5-Trimethylbenzene	105	13.301	13.284	0.017	94	680535	5.00	4.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
128 4-Chlorotoluene	126	13.319	13.301	0.018	98	226109	5.00	4.93	
129 tert-Butylbenzene	119	13.684	13.667	0.017	95	729258	5.00	4.75	
130 1,2,4-Trimethylbenzene	105	13.736	13.719	0.017	96	634779	5.00	4.72	
131 sec-Butylbenzene	134	13.928	13.911	0.017	95	191704	5.00	4.73	
132 1,3-Dichlorobenzene	146	14.050	14.032	0.018	96	300035	5.00	4.58	
133 4-Isopropyltoluene	119	14.085	14.067	0.018	98	857683	5.00	4.92	
134 1,4-Dichlorobenzene	146	14.137	14.137	0.000	94	522846	5.00	5.17	
137 n-Butylbenzene	91	14.520	14.503	0.017	98	870770	5.00	4.76	
138 1,2-Dichlorobenzene	146	14.537	14.520	0.017	96	344254	5.00	5.01	
139 1,2-Dibromo-3-Chloropropan	157	15.321	15.303	0.018	82	32899	5.00	5.13	
144 1,2,3-Trichlorobenzene	180	16.087	16.069	0.018	93	239815	5.00	5.19	
142 Hexachlorobutadiene	225	16.243	16.226	0.017	97	239213	5.00	4.97	
143 Naphthalene	128	16.313	16.296	0.017	97	267634	5.00	5.09	
141 1,2,4-Trichlorobenzene	180	16.539	16.522	0.017	95	185955	5.00	5.11	
S 151 1,2-Dichloroethene, Total	96				0		10.0	9.63	
S 145 Trihalomethanes, Total	1				0		20.0	20.1	
S 146 Xylenes, Total (URS)	1				0		10.0	10.1	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.4	
S 149 1,2-Dichloroethene, Total	1				0		10.0	9.63	
S 150 Xylenes, Total	106				0		10.0	10.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-Main B_00009	Amount Added: 2.50	Units: uL	
MV-Gas/Ket B_00017	Amount Added: 2.50	Units: uL	
MV-SS 2-Cleve_00020	Amount Added: 2.50	Units: uL	
MV-568718-D_00002	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.68	Units: uL	Run Reagent

Report Date: 29-May-2015 17:54:11

Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

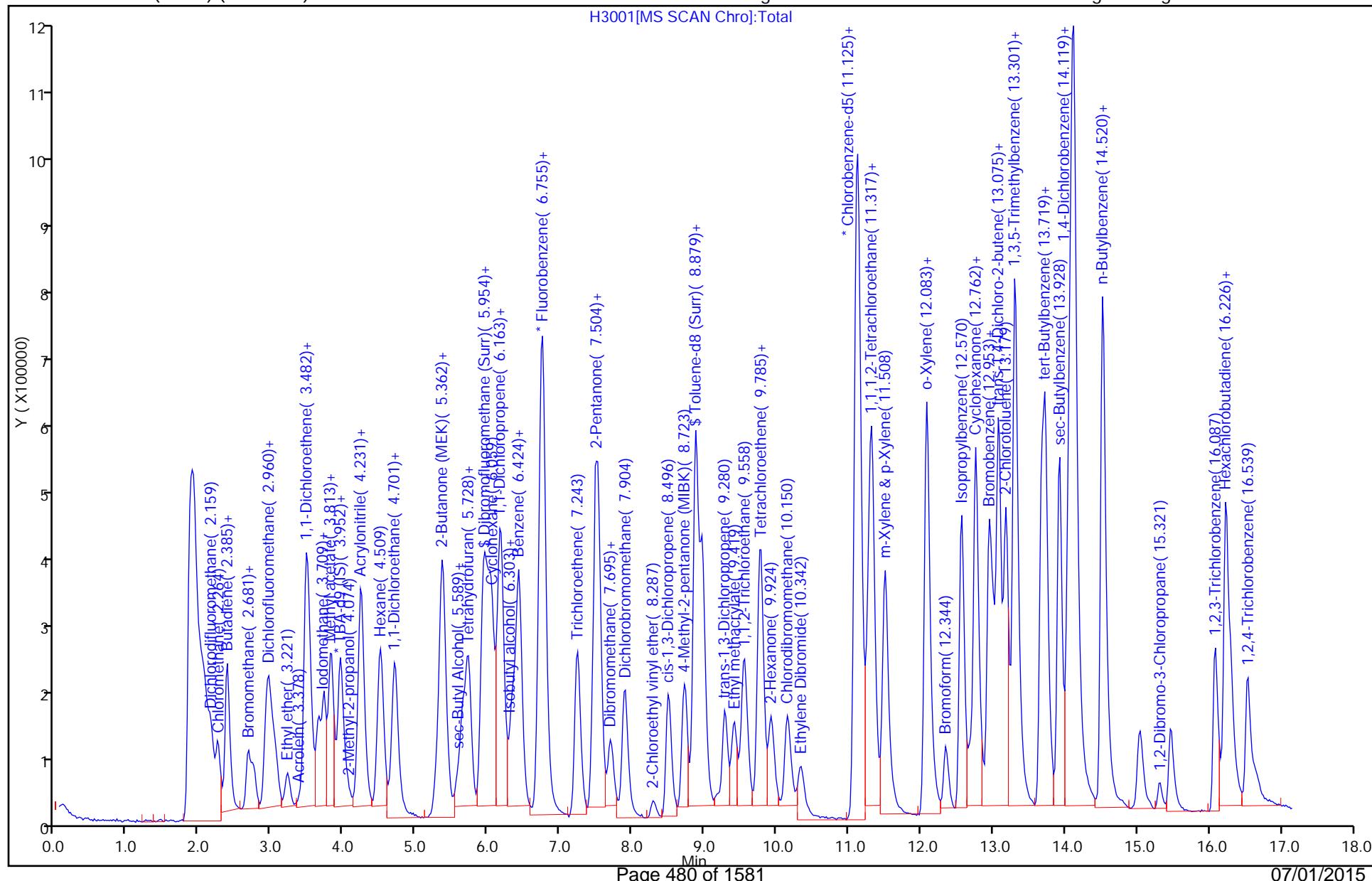
Data File: \\Denchrom\ChromData\VMS_H\20150528-35487.b\H3001.D
 Injection Date: 28-May-2015 20:25:30
 Lims ID: LCS
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSH_8260
 Column: DB-624 (75.53) (0.53 mm)

Instrument ID: VMS_H

Operator ID: bergerb
Worklist Smp#: 4Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid

ALS Bottle#: 4

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: LCS 280-278801/2-A

Matrix: Solid (TCLP)

Lab File ID: P4812.D

Analysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)

Date Analyzed: 06/02/2015 23:22

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 (60.25) ID: 0.25 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 280068

Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-35-4	1,1-Dichloroethene	0.00465		0.0010	0.00080	0.00023
107-06-2	1,2-Dichloroethane	0.00482		0.0010	0.00040	0.00013
78-93-3	2-Butanone (MEK)	0.0182		0.010	0.0040	0.0018
71-43-2	Benzene	0.00480		0.0010	0.00040	0.00016
56-23-5	Carbon tetrachloride	0.00518		0.0010	0.00040	0.00019
108-90-7	Chlorobenzene	0.00466		0.0010	0.00040	0.00017
67-66-3	Chloroform	0.00491		0.0010	0.00040	0.00016
127-18-4	Tetrachloroethene	0.00480		0.0010	0.00040	0.00020
79-01-6	Trichloroethene	0.00468		0.0010	0.00040	0.00016
75-01-4	Vinyl chloride	0.00476		0.0010	0.00020	0.00010

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		64-129
460-00-4	4-Bromofluorobenzene (Surr)	94		78-121
1868-53-7	Dibromofluoromethane (Surr)	107		79-119
2037-26-5	Toluene-d8 (Surr)	105		78-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4812.D
 Lims ID: LCS 280-278801/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 02-Jun-2015 23:22:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 20.000 mL Dil. Factor: 1.0000
 Sample Info: LCS 280-278801/2-A
 Operator ID: contrerase Instrument ID: VMS_P
 Method: \\Denchrom\ChromData\VMS_P\20150602-35633.b\AO_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 03-Jun-2015 09:03:48 Calib Date: 02-Jun-2015 14:13:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\VMS_P\20150602-35598.b\P4787.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: contrerase Date: 02-Jun-2015 23:59:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.794	5.787	0.007	91	169277	250.0	250.0	
* 1 Fluorobenzene	96	7.767	7.768	-0.001	97	1485796	12.5	12.5	
* 2 Chlorobenzene-d5	119	10.026	10.020	0.006	90	343462	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.871	11.865	0.006	97	533585	12.5	12.5	
\$ 5 Dibromofluoromethane (Surr)	111	7.224	7.217	0.007	92	413850	12.0	12.9	
\$ 6 1,2-Dichloroethane-d4 (Sur)	65	7.517	7.518	-0.001	99	387004	12.0	12.5	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.940	0.000	95	1778414	12.0	12.6	
\$ 8 4-Bromofluorobenzene (Surr)	95	10.899	10.892	0.007	86	564793	12.0	11.2	
23 Dichlorodifluoromethane	85	3.998	4.001	-0.003	100	281429	5.00	5.06	
26 Chloromethane	50	4.222	4.225	-0.003	100	187983	5.00	4.57	
27 Vinyl chloride	62	4.389	4.378	0.011	82	185237	5.00	4.76	
29 Bromomethane	94	4.753	4.756	-0.003	93	116263	5.00	4.71	
30 Chloroethane	64	4.822	4.825	-0.003	98	115573	5.00	4.71	
31 Dichlorofluoromethane	67	4.976	4.979	-0.003	98	383696	5.00	4.84	
32 Trichlorofluoromethane	101	5.088	5.091	-0.003	100	367160	5.00	5.00	
35 Ethyl ether	59	5.241	5.244	-0.003	94	95347	5.00	4.27	
39 Acrolein	56	5.409	5.412	-0.003	99	71271	50.0	51.0	
40 1,1,2-Trichloro-1,2,2-trif	151	5.493	5.496	-0.003	95	188646	5.00	4.90	
41 Acetone	43	5.522	5.496	0.026	41	88791	20.0	17.3	
43 1,1-Dichloroethene	96	5.543	5.544	-0.001	94	205420	5.00	4.65	
44 Iodomethane	142	5.729	5.723	0.006	99	307415	5.00	4.73	
45 Methyl acetate	43	5.744	5.744	0.000	99	1577847	25.0	138.2	
47 3-Chloro-1-propene	41	5.801	5.794	0.007	89	423239	5.00	4.70	
48 Carbon disulfide	76	5.837	5.809	0.028	100	809338	5.00	4.69	
49 2-Methyl-2-propanol	59	5.858	5.852	0.006	91	51151	50.0	50.8	
50 Methylene Chloride	84	5.901	5.902	-0.001	98	197787	5.00	4.62	
52 Acrylonitrile	53	6.065	6.066	-0.001	99	219823	50.0	43.6	
51 Methyl tert-butyl ether	73	6.065	6.066	-0.001	95	241944	5.00	4.07	
53 trans-1,2-Dichloroethene	96	6.115	6.109	0.006	94	217847	5.00	4.84	
54 Hexane	57	6.266	6.266	0.000	95	388536	5.00	4.75	
55 Vinyl acetate	43	6.380	6.381	-0.001	97	357491	10.0	9.11	
57 1,1-Dichloroethane	63	6.444	6.445	-0.001	97	411970	5.00	4.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 2-Butanone (MEK)	43	6.838	6.831	0.007	99	149540	20.0	18.2	
62 sec-Butyl Alcohol	45	6.880	6.874	0.006	44	104881	150.0	137.7	
63 cis-1,2-Dichloroethene	96	6.880	6.881	-0.001	88	201057	5.00	4.72	
64 2,2-Dichloropropane	77	6.902	6.903	-0.001	86	289687	5.00	4.92	
67 Chlorobromomethane	128	7.088	7.081	0.007	61	64718	5.00	4.40	
68 Chloroform	83	7.088	7.089	-0.001	95	350196	5.00	4.91	
69 Tetrahydrofuran	42	7.116	7.110	0.006	86	32057	10.0	7.33	
70 Isobutyl alcohol	41	7.295	7.289	0.006	45	49121	125.0	133.7	
71 1,1,1-Trichloroethane	97	7.302	7.303	-0.001	97	332774	5.00	5.01	
72 Cyclohexane	56	7.367	7.367	0.000	97	438832	5.00	4.68	
73 1,1-Dichloropropene	75	7.410	7.403	0.007	98	343658	5.00	5.40	
74 Carbon tetrachloride	117	7.438	7.439	-0.001	95	306489	5.00	5.18	
76 1,2-Dichloroethane	62	7.581	7.575	0.006	98	198380	5.00	4.82	
77 Benzene	78	7.595	7.589	0.006	98	828951	5.00	4.80	
14 n-Heptane	43	7.645	7.646	-0.001	95	450593	5.00	4.80	
79 Trichloroethene	95	8.053	8.047	0.006	96	212073	5.00	4.68	
80 2-Pentanone	43	8.103	8.097	0.006	98	153306	20.0	14.5	
82 Methylcyclohexane	55	8.232	8.225	0.007	92	380534	5.00	5.07	
83 1,2-Dichloropropane	63	8.239	8.240	-0.001	90	190436	5.00	4.62	
84 1,4-Dioxane	88	8.289	8.290	-0.001	91	10116	100.0	81.1	
85 Dibromomethane	93	8.346	8.347	-0.001	93	62241	5.00	4.52	
86 Dichlorobromomethane	83	8.411	8.411	0.000	98	196277	5.00	4.48	
87 2-Chloroethyl vinyl ether	63	8.554	8.547	0.007	92	34897	5.00	3.36	
89 cis-1,3-Dichloropropene	75	8.725	8.726	-0.001	90	203824	5.00	4.18	
90 4-Methyl-2-pentanone (MIBK)	43	8.775	8.776	-0.001	100	241390	20.0	15.9	
91 Toluene	91	8.997	8.990	0.007	97	863055	5.00	4.85	
92 Ethyl methacrylate	69	9.076	9.069	0.007	92	78202	5.00	3.53	
93 trans-1,3-Dichloropropene	75	9.097	9.098	-0.001	99	152261	5.00	4.37	
94 1,1,2-Trichloroethane	97	9.254	9.255	-0.001	96	84578	5.00	4.44	
95 2-Hexanone	43	9.369	9.362	0.007	98	158286	20.0	15.8	
96 1,3-Dichloropropane	76	9.390	9.391	-0.001	98	159942	5.00	4.29	
97 Tetrachloroethene	164	9.404	9.398	0.006	95	175369	5.00	4.80	
98 Chlorodibromomethane	129	9.590	9.584	0.006	90	90820	5.00	3.90	
100 Ethylene Dibromide	107	9.712	9.713	-0.001	98	73329	5.00	4.38	
101 1-Chlorohexane	91	9.926	9.920	0.006	87	281578	5.00	4.68	
102 Chlorobenzene	112	10.048	10.042	0.006	97	494843	5.00	4.66	
103 Ethylbenzene	106	10.077	10.077	0.000	99	302958	5.00	4.74	
104 1,1,2-Tetrachloroethane	131	10.084	10.077	0.007	93	144090	5.00	4.56	
105 m-Xylene & p-Xylene	106	10.155	10.149	0.006	99	364830	5.00	4.71	
107 o-Xylene	106	10.477	10.471	0.006	89	336043	5.00	4.75	
106 Styrene	104	10.477	10.471	0.006	84	464935	5.00	4.49	
108 Bromoform	173	10.691	10.685	0.006	93	37020	5.00	3.48	
109 Isopropylbenzene	105	10.734	10.728	0.006	97	968254	5.00	4.84	
111 Cyclohexanone	55	10.885	10.878	0.006	92	68675	200.0	147.7	
112 1,1,2,2-Tetrachloroethane	83	10.956	10.950	0.006	95	84515	5.00	4.27	
113 trans-1,4-Dichloro-2-butene	53	10.985	10.985	0.000	77	23040	5.00	4.11	
114 1,2,3-Trichloropropane	110	11.028	11.021	0.007	88	23589	5.00	4.34	
115 N-Propylbenzene	120	11.056	11.050	0.006	99	273772	5.00	4.80	
116 Bromobenzene	156	11.070	11.064	0.006	98	177893	5.00	4.69	
117 1,3,5-Trimethylbenzene	105	11.163	11.164	-0.001	94	799123	5.00	4.98	
118 2-Chlorotoluene	126	11.185	11.178	0.007	95	221486	5.00	4.78	
119 4-Chlorotoluene	126	11.263	11.257	0.006	99	217911	5.00	4.79	

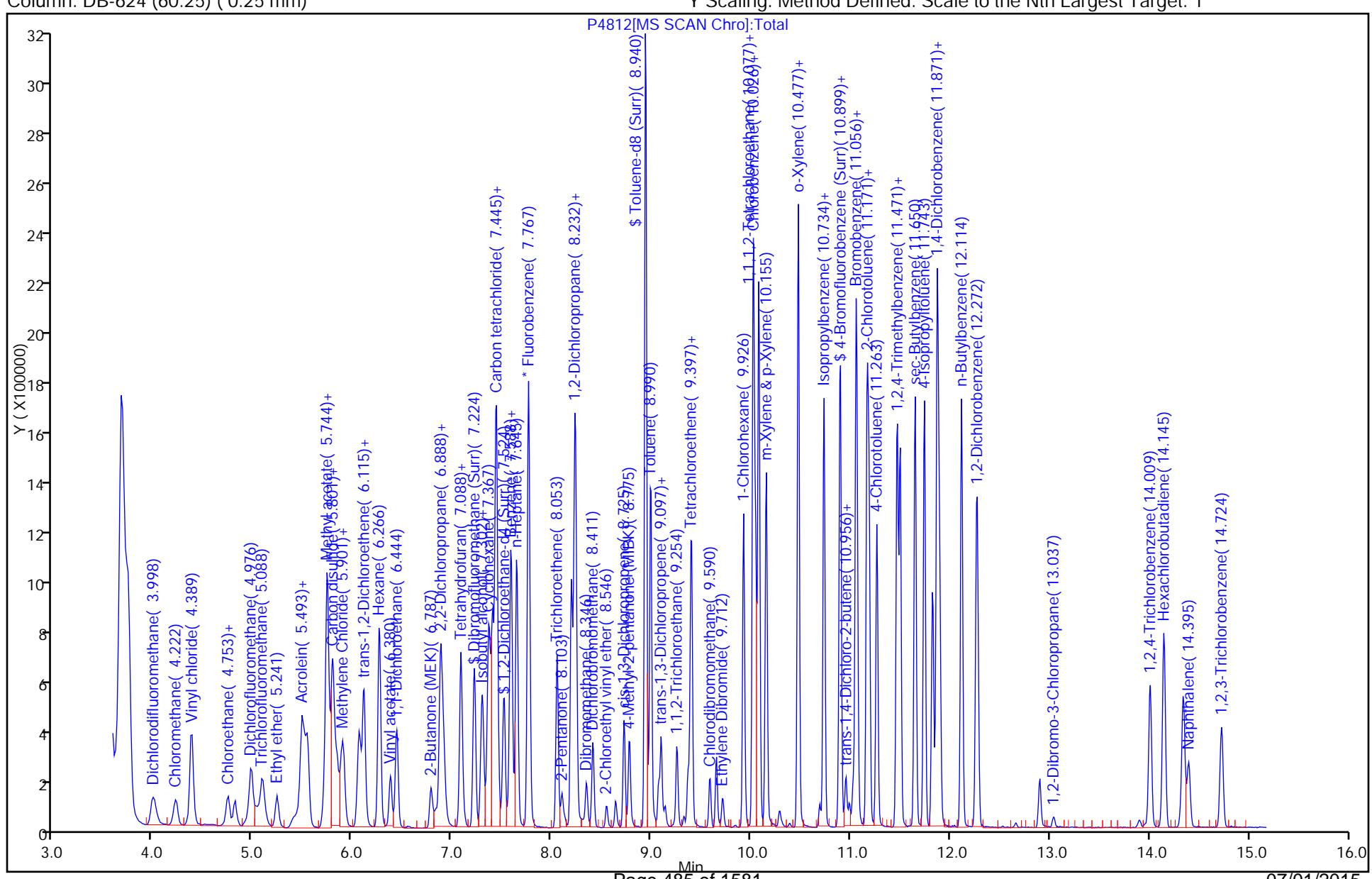
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 tert-Butylbenzene	119	11.471	11.464	0.007	94	808692	5.00	4.90	
121 1,2,4-Trimethylbenzene	105	11.499	11.493	0.006	99	805719	5.00	4.96	
122 sec-Butylbenzene	134	11.650	11.643	0.007	95	230171	5.00	4.90	
123 4-Isopropyltoluene	119	11.743	11.736	0.007	97	935514	5.00	5.06	
124 1,3-Dichlorobenzene	146	11.821	11.822	-0.001	96	388863	5.00	4.70	
126 1,4-Dichlorobenzene	146	11.893	11.893	0.000	93	384642	5.00	4.66	
127 n-Butylbenzene	91	12.114	12.108	0.006	99	945755	5.00	5.07	
128 1,2-Dichlorobenzene	146	12.264	12.265	-0.001	95	320290	5.00	4.64	
129 1,2-Dibromo-3-Chloropropan	157	13.044	13.037	0.007	71	10516	5.00	3.79	
130 1,2,4-Trichlorobenzene	180	14.009	14.003	0.006	94	219050	5.00	4.58	
131 Hexachlorobutadiene	225	14.145	14.146	-0.001	97	185973	5.00	5.08	
132 Naphthalene	128	14.395	14.389	0.006	97	282537	5.00	4.44	
133 1,2,3-Trichlorobenzene	180	14.724	14.725	-0.001	94	168474	5.00	4.45	
S 140 1,2-Dichloroethene, Total	96				0		10.0	9.56	
S 138 1,2-Dichloroethene, Total	1				0		10.0	9.56	
S 139 Xylenes, Total	106				0		10.0	9.46	
S 137 1,3-Dichloropropene, Total	1				0		10.0	8.55	
S 134 Trihalomethanes, Total	1				0		20.0	16.8	
S 135 Xylenes, Total (URS)	1				0		10.0	9.46	

Reagents:

MV-SS 2-Cleve_00021	Amount Added: 2.50	Units: uL	
MV-Main B_00010	Amount Added: 2.50	Units: uL	
MV-Gas/Ket B_00017	Amount Added: 2.50	Units: uL	
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00035	Amount Added: 0.96	Units: uL	Run Reagent

Data File: \\Denchrom\ChromData\VMS_P\20150602-35633.b\P4812.D
 Injection Date: 02-Jun-2015 23:22:30
 Lims ID: LCS 280-278801/2-A
 Client ID:
 Purge Vol: 20.000 mL
 Method: AQ_VMSP_8260
 Column: DB-624 (60.25) (0.25 mm)

TestAmerica Denver
 Instrument ID: VMS_P
 Operator ID: contrerase
 Worklist Smp#: 12
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260B Water and Solid
 ALS Bottle#: 12
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.:

Instrument ID: VMS_HStart Date: 05/27/2015 23:12Analysis Batch Number: 279265End Date: 05/28/2015 05:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-279265/1		05/27/2015 23:12	1	H2946.D	DB-624 (75.53) 0.53 (mm)
IC 280-279265/9		05/28/2015 00:18	1	H2949.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 00:18	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/10		05/28/2015 00:40	1	H2950.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 00:40	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/11		05/28/2015 01:03	1	H2951.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 01:03	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/12		05/28/2015 01:25	1	H2952.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 01:25	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/13		05/28/2015 01:48	1	H2953.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 01:48	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/14		05/28/2015 02:10	1	H2954.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 02:10	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/15		05/28/2015 02:33	1	H2955.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 02:33	1		DB-624 (75.53) 0.53 (mm)
ICV 280-279265/22		05/28/2015 02:55	1	H2956.D	DB-624 (75.53) 0.53 (mm)
IC 280-279265/16		05/28/2015 03:18	1	H2957.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 03:18	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/17		05/28/2015 03:40	1	H2958.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 03:40	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/18		05/28/2015 04:03	1	H2959.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 04:03	1		DB-624 (75.53) 0.53 (mm)
ICIS 280-279265/19		05/28/2015 04:25	1	H2960.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 04:25	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/20		05/28/2015 04:48	1	H2961.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 04:48	1		DB-624 (75.53) 0.53 (mm)
IC 280-279265/21		05/28/2015 05:10	1	H2962.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 05:10	1		DB-624 (75.53) 0.53 (mm)
ICV 280-279265/23		05/28/2015 05:32	1	H2963.D	DB-624 (75.53) 0.53 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.:

Instrument ID: VMS_HStart Date: 05/28/2015 18:54Analysis Batch Number: 279458End Date: 05/29/2015 06:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-279458/1		05/28/2015 18:54	1	H2997.D	DB-624 (75.53) 0.53 (mm)
CCV 280-279458/2		05/28/2015 19:17	1	H2998.D	DB-624 (75.53) 0.53 (mm)
CCV 280-279458/3		05/28/2015 19:39	1	H2999.D	DB-624 (75.53) 0.53 (mm)
LCS 280-279458/4		05/28/2015 20:25	1	H3001.D	DB-624 (75.53) 0.53 (mm)
MB 280-279458/6		05/28/2015 21:10	1	H3003.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 21:33	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 21:56	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 22:18	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 22:41	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 23:03	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 23:26	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/28/2015 23:49	1		DB-624 (75.53) 0.53 (mm)
280-69513-1	54403-TB17-0515	05/29/2015 00:11	1	H3011.D	DB-624 (75.53) 0.53 (mm)
280-69513-2	54400-MW53D-0515	05/29/2015 00:34	1	H3012.D	DB-624 (75.53) 0.53 (mm)
280-69513-3	54400-MW53S-0515	05/29/2015 00:56	1	H3013.D	DB-624 (75.53) 0.53 (mm)
280-69513-4	54402-EB17-0515	05/29/2015 01:19	1	H3014.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 01:41	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 02:04	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 02:26	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 02:49	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 03:11	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 03:33	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 03:56	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 04:18	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 04:40	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 05:03	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 05:25	2		DB-624 (75.53) 0.53 (mm)
ZZZZZ		05/29/2015 05:48	20		DB-624 (75.53) 0.53 (mm)
CCVC 280-279458/33		05/29/2015 06:10	1	H3027.D	DB-624 (75.53) 0.53 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Instrument ID: VMS_P Start Date: 05/16/2015 10:50
Analysis Batch Number: 277770 End Date: 05/16/2015 16:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-277770/1		05/16/2015 10:50	1	P4170.D	DB-624 (60.25) 0.25 (mm)
IC 280-277770/9		05/16/2015 11:35	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/10		05/16/2015 11:55	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/11		05/16/2015 12:15	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/12		05/16/2015 12:34	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/13		05/16/2015 12:54	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/14		05/16/2015 13:13	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/15		05/16/2015 13:33	1		DB-624 (60.25) 0.25 (mm)
ICV 280-277770/16		05/16/2015 14:12	1		DB-624 (60.25) 0.25 (mm)
IC 280-277770/17		05/16/2015 14:32	1	P4181.D	DB-624 (60.25) 0.25 (mm)
IC 280-277770/18		05/16/2015 14:51	1	P4182.D	DB-624 (60.25) 0.25 (mm)
IC 280-277770/19		05/16/2015 15:11	1	P4183.D	DB-624 (60.25) 0.25 (mm)
ICIS 280-277770/20		05/16/2015 15:30	1	P4184.D	DB-624 (60.25) 0.25 (mm)
IC 280-277770/21		05/16/2015 15:50	1	P4185.D	DB-624 (60.25) 0.25 (mm)
IC 280-277770/22		05/16/2015 16:09	1	P4186.D	DB-624 (60.25) 0.25 (mm)
ICV 280-277770/23		05/16/2015 16:48	1	P4188.D	DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Instrument ID: VMS_P

Start Date: 06/02/2015 11:21

Analysis Batch Number: 279915

End Date: 06/02/2015 22:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-279915/1		06/02/2015 11:21	1	P4779.D	DB-624 (60.25) 0.25 (mm)
STD003 280-279915/12		06/02/2015 12:15	1	P4781.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 12:15	1		DB-624 (60.25) 0.25 (mm)
STD010 280-279915/13		06/02/2015 12:35	1	P4782.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 12:35	1		DB-624 (60.25) 0.25 (mm)
STD020 280-279915/14		06/02/2015 12:55	1	P4783.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 12:55	1		DB-624 (60.25) 0.25 (mm)
STD050 280-279915/15		06/02/2015 13:14	1	P4784.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 13:14	1		DB-624 (60.25) 0.25 (mm)
STD10 280-279915/16		06/02/2015 13:34	1	P4785.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 13:34	1		DB-624 (60.25) 0.25 (mm)
STD30 280-279915/17		06/02/2015 13:54	1	P4786.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 13:54	1		DB-624 (60.25) 0.25 (mm)
STD60 280-279915/18		06/02/2015 14:13	1	P4787.D	DB-624 (60.25) 0.25 (mm)
IC					
ZZZZZ		06/02/2015 14:13	1		DB-624 (60.25) 0.25 (mm)
ICV 280-279915/19		06/02/2015 14:33	1	P4788.D	DB-624 (60.25) 0.25 (mm)
ICV 280-279915/20		06/02/2015 15:21	1	P4789.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 16:09	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 16:48	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 17:08	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 17:28	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 17:47	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 18:27	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 18:47	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 19:07	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 19:26	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 19:46	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 20:06	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 20:25	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 20:45	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 21:05	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 21:24	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 21:44	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/02/2015 22:06	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica DenverJob No.: 280-69513-1

SDG No.:

Instrument ID: VMS_PStart Date: 06/02/2015 22:24Analysis Batch Number: 280068End Date: 06/03/2015 08:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-280068/1		06/02/2015 22:24	1	P4809.D	DB-624 (60.25) 0.25 (mm)
CCV 280-280068/2		06/02/2015 22:41	1	P4810.D	DB-624 (60.25) 0.25 (mm)
CCV 280-280068/3		06/02/2015 23:01	1	P4811.D	DB-624 (60.25) 0.25 (mm)
LCS 280-278801/2-A		06/02/2015 23:22	1	P4812.D	DB-624 (60.25) 0.25 (mm)
LB 280-278801/1-A		06/02/2015 23:41	1	P4813.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 00:01	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 00:20	1		DB-624 (60.25) 0.25 (mm)
280-69513-5	54400-IDW01-0515	06/03/2015 00:40	1	P4816.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 01:19	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 01:38	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 01:58	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 02:18	1		DB-624 (60.25) 0.25 (mm)
280-69513-6	54400-IDW02-0515	06/03/2015 02:37	1	P4822.D	DB-624 (60.25) 0.25 (mm)
CCVC 280-280068/22		06/03/2015 02:57	1	P4823.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 03:16	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 03:36	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 03:55	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 04:15	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 04:34	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 04:54	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 05:13	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 05:33	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 07:29	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 07:48	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 08:08	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/03/2015 08:27	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA Continuing Calibration Review Checklist

TestAmerica Denver

Instrument ID and Date: H 05/28/15 pm

Check Method Used: Analysis 624 8260B Other VOA _____

VOA Preparation 5mL 20mL 5035 Low 5035 High 5030 Low 5030 High

Continuing Calibration	Review Items	Level 1		Level 2		Comments
		Yes	No	N/A		
1. BFB meets criteria?		/			/	
2. ICAL date and instrument ID verified?		/			/	
3. Do SPCC RRFs and CCC %Ds meet method criteria?		/			/	
4. Does %D meet criteria for non-CCC compounds?		/			/	
5. Isomeric pairs checked for correct peak assignment?	Vinyl acetate/Isopropyl ether 1,3-/1,4-/1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,35-/1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2-/4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropane / cis / tran -1,3-Dichloropropane /1,2,3-Trichloropropane					
6. Label number of standard used recorded?		/			/	
7. Manual integrations documented and checked?		/			/	
8. Do the Internal Standards meet criteria for %D against ICAL?		/			/	
9. Does this CCV pass Q4 criteria?		/			/	

1st Level Reviewer:
J. B. J.

Date: 05/28/15
Date: 05/28/15

2nd Level Reviewer:
Z. Z.

Sequence Name: C:\HPCHEM\1\SEQUENCE\052815PM.S
 Comment:
 Operator: bergerb
 Data Path: C:\HPCHEM\1\DATA\052815pm\
 Pre-Seq Cmd:
 Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch
 Full Method Inject Anyway
 Reprocessing Only Don't Inject

Test America Denver
 Instrument: H
 DV-MS-0010 (8260B/624) (Circle)
 Purge Volume: 20mL(5mL/5g)
 (Circle)
 Tune Time: 1854
 Other Patches: 279 458

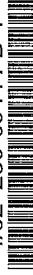
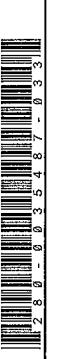
Line	Type	Vial	DataFile	Method	Sample Name	
1	Sample	100	H2997	BFB	BFB	1854
2	Sample	1	H2998	8260	CCV M	871
3	Sample	2	H2999	8260	CCV S	
4	Sample	3	H3000	8260	LCS	5/28/15
5	Sample	4	H3001	8260	LCSD	
6	Sample	5	H3002	8260	blank	
7	Sample	6	H3003	8260	MB AF	
8	Sample	7	H3004	8260	280-69686-A-1	pH<2
9	Sample	8	H3005	8260	280-69686-A-1	pH<2 ms
10	Sample	9	H3006	8260	280-69686-A-1	pH<2 msd
11	Sample	10	H3007	8260	280-69686-A-2	pH<2
12	Sample	11	H3008	8260	280-69686-A-3	pH<2
13	Sample	12	H3009	8260	280-69686-A-4	pH<2
14	Sample	13	H3010	8260	280-69686-A-5	pH<2
15	Sample	14	H3011	8260	280-69513-A-1	pH<2
16	Sample	15	H3012	8260	280-69513-A-2	pH<2
17	Sample	16	H3013	8260	280-69513-A-3	pH<2
18	Sample	17	H3014	8260	280-69513-A-4	pH<2
19	Sample	18	H3015	8260	280-69589-A-1	pH<2
20	Sample	19	H3016	8260	280-69589-G-2	pH<2
21	Sample	20	H3017	8260	280-69589-B-3	pH<2
22	Sample	21	H3018	8260	280-69581-A-1	pH<2
23	Sample	22	H3019	8260	280-69581-A-2	pH<2
24	Sample	23	H3020	8260	280-69501-C-1	pH<2
25	Sample	24	H3021	8260	280-69501-D-2	pH<2
26	Sample	25	H3022	8260	280-69501-B-4	pH<2
27	Sample	26	H3023	8260	280-69443-D-1	pH<2
28	Sample	27	H3024	8260	280-69443-A-2	pH<2
29	Sample	28	H3025	8260	280-69444-B-1	pH<2 10ml E
30	Sample	29	H3026	8260	280-69444-B-1	pH<2 1ml DL
31	Sample	30	H3027	8260	CCVC	

TestAmerica Laboratories
Worklist Report

Worklist Name: 052815pm
Instrument Name: VMS_H
Purge Volume: 20.00
Analysis Type: VOA
Batch Directory: \\Denchrom\\ChromData\\VMS_H\\20150528-35487.b
Upload Directory: \\CorporateSapp06\\280-DN-RawData\\Organics\\MS\\VMS_H
Run Reagent: MV-568718-D_00002
Run Reagent: MV-ARCH SS A_00042

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035487-001	#1 BFB 		BFB	voaWater	1.000000	20.00	uL	1.000000
280-0035487-002	#2 CCV 		CCV	voaWater	1.000000	20.00	mL	1.000000
280-0035487-003	#3 CCV 		CCV	voaWater	1.000000	20.00	mL	1.000000
280-0035487-004	#4 LCSS 		LCSS	voaWater	1.000000	20.00	mL	1.000000
280-0035487-005	#5 LCSD 		LCSD	voaWater	1.000000	20.00	mL	1.000000
280-0035487-006	#6 MB 		MB	voaWater	1.000000	20.00	mL	1.000000
280-0035487-007	#7 280-62974-A-1 			Client	voaWater	20.00	mL	1.000000
280-0035487-008	#8 280-62974-A-2 			Client	voaWater	20.00	mL	1.000000
280-0035487-009	#9 280-62974-A-3 			Client	voaWater	20.00	mL	1.000000
280-0035487-010	#10 280-69686-A-1 MS 		MS	voaWater	20.00	mL	1.000000	
280-0035487-011	#11 280-69686-A-1 MS 		MS	voaWater	20.00	mL	1.000000	
280-0035487-012	#12 280-69686-A-1 MSD 		MSD	voaWater	20.00	mL	1.000000	

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035487-013	#13 280-69686-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035487-014	#14 280-69686-A-3 		Client	voaWater	20.00	mL	1.000000	
280-0035487-015	#15 280-69686-A-4 		Client	voaWater	20.00	mL	1.000000	
280-0035487-016	#16 280-69686-A-5 		Client	voaWater	20.00	mL	1.000000	
280-0035487-017	#17 280-69513-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035487-018	#18 280-69513-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035487-019	#19 280-69513-A-3 		Client	voaWater	20.00	mL	1.000000	
280-0035487-020	#20 280-69513-A-4 		Client	voaWater	20.00	mL	1.000000	
280-0035487-021	#21 280-69589-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035487-022	#22 280-69589-G-2 		Client	voaWater	20.00	mL	1.000000	
280-0035487-023	#23 280-69589-B-3 		Client	voaWater	20.00	mL	1.000000	
280-0035487-024	#24 280-69581-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035487-025	#25 280-69581-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035487-026	#26 280-69501-C-1 		Client	voaWater	20.00	mL	1.000000	
280-0035487-027	#27 280-69501-D-2 		Client	voaWater	20.00	mL	1.000000	
280-0035487-028	#28 280-69501-B-4 		Client	voaWater	20.00	mL	1.000000	
280-0035487-029	#29 280-69443-D-1 		Client	voaWater	20.00	mL	1.000000	
280-0035487-030	#30 280-69443-A-2 		Client	voaWater	20.00	mL	1.000000	

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035487-031 	#31 280-69444-B-1 		Client	voaWater		10.00	mL	1.000000
280-0035487-032 	#32 280-69444-B-1 		Client	voaWater		1.000000	mL	1.000000
280-0035487-033 	#33 CC/C 	MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009 	CC/C	voaWater		20.00	mL	1.000000

GC/MS VOA Continuing Calibration Review Checklist

TestAmerica Denver

Instrument ID and Date: P 06/02/15 pmWork List 35633Check Method Used: Analysis 624 8260B Other VOA _____VOA Preparation 5mL 20mL 5035 Low 5035 High 5030 Low 5030 High

Continuing Calibration Review Items	Comments			
	Yes	N/A	Level 1	Level 2
1. BFB meets criteria?	/		/	
2. ICAL date and instrument ID verified?	/		/	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	/		/	
4. Does %D meet criteria for non-CCC compounds?	/			
5. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3-/1,4-/1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2-/4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene / cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropane / cis / tran -1,3-Dichloropropane / 1,2,3-Trichloropropane		/		
6. Label number of standard used recorded?	/		/	
7. Manual integrations documented and checked?	/		/	
8. Do the Internal Standards meet criteria for %D against ICAL?	/		/	
9. Does this CCV pass Q4 criteria?	/		/	True only (Q5)

1st Level Reviewer: 
Z. Z. Z.Date: 06/02/152nd Level Reviewer: 
S. S. S.Date: 06/03/15

Sequence Name: C:\HPCHEM\1\SEQUENCE\060215.S

Comment:

Operator: contrerase

Data Path: C:\HPCHEM\1\DATA\060215pm\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run

(X) Full Method
() Reprocessing Only

On A Barcode Mismatch

(X) Inject Anyway
() Don't Inject

Techniconic Denver

Print:

MS-0010 ((260/624) (Circle))

Sample Volume: (20mL/5mL/5g)

Run Date: 2224-0827

28006B

Line Type Vial DataFile Method Sample Name

1	Sample	100	P4809	BFB	BFB	
2	Sample	10	P4810	8260	ccv	
3	Sample	11	P4811	8260	ccv	
4	Sample	12	P4812	8260	LCS 280-278801/2-A	
5	Sample	13	P4813	8260	LB 280-278801/1-A	
6	Sample	14	P4814	8260	680-112677-D-13-D 0.2mL	RR2
7	Sample	15	P4815	8260	680-112677-D-14-B 0.2mL	RR2
8	Sample	16	P4816	8260	280-69513-B-5-A	
9	Sample	17	P4817	8260	280-69513-B-6-A 1mL	
10	Sample	18	P4818	8260	680-112677-D-13-D	
11	Sample	19	P4819	8260	680-112677-D-13-D ms	
12	Sample	20	P4820	8260	680-112677-D-13-D msd	
13	Sample	21	P4821	8260	680-112677-D-14-B	
14	Sample	22	P4822	8260	280-69513-b-6-a	
15	Sample	23	P4823	8260	ccvc	
16	Sample	24	P4824	8260	280-69327-C-1-A 0.2mL	RR2
17	Sample	25	P4825	8260	280-69327-C-3-A	
18	Sample	26	P4826	8260	280-69327-C-5-A 0.2mL	RR2
19	Sample	27	P4827	8260	280-69327-C-7-A	
20	Sample	28	P4828	8260	280-69327-C-9-A	
21	Sample	29	P4829	8260	280-69488-D-1-A 1mL	RR2.
22	Sample	30	P4830	8260	280-69516-B-1-A 0.2mL	NTC
23	Sample	31	P4831	8260	280-69516-B-2-A 0.2mL	NTC
24	Sample	32	P4832	8260	280-69327-C-1-A	
25	Sample	33	P4833	8260	280-69327-C-5-A	
26	Sample	34	P4834	8260	280-69327-C-7-A	
27	Sample	35	P4835	8260	280-69488-D-1-A	
28						

TestAmerica Laboratories
Worklist Report

Worklist Name: 060215pm
Instrument Name: VMS_P
Purge Volume: 20.00
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_P\20150602-35633.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: MV-567649-D_00001
Run Reagent: MV-ARCH SS A_00035

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035633-001	#1 BFB 	MV-BFB_00017	BFB	voaWater	1.000000	uL	1.000000	
280-0035633-002	#2 CCV 	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00033 MV-Cleve+AVA_00010	CCV	voaWater	20.00	mL	1.000000	
280-0035633-003	#3 CCV 	MV-Supp A_00011	CCV	voaWater	20.00	mL	1.000000	
280-0035633-004	#4 LCS 	MV-Gas/Ket B_00017 MV-Main B_00010 MV-SS 2-Cleve_00021	LCS	voaWater	20.00	mL	1.000000	
280-0035633-005	#5 LCSD 	MV-Main B_00010 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00021	LCSD	voaWater	20.00	mL	1.000000	
280-0035633-006	#6 LCS 		LCS	voaWater	20.00	mL	1.000000	
280-0035633-007	#7 LCSD 		LCSD	voaWater	20.00	mL	1.000000	
280-0035633-008	#8 MB 		MB	voaWater	20.00	mL	1.000000	
280-0035633-009	#9 280-62974-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035633-010	#10 280-62974-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035633-011	#11 280-62974-A-3 		Client	voaWater	20.00	mL	1.000000	
280-0035633-012	#12 LCS 280-2788012-A MV-SS 2-Cleve_00021 MV-Main B_00010 MV-Gas/Ket B_00017 		LCS	voaWater	20.00	mL	1.000000	

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lv	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035633-013	#13 LB 280-278801/1-A		LB	voaWater	20.00	mL	1.000000	
280-0035633-014	#14 680-112677-D-13-D		Client	voaWater	0.200000	mL	1.000000	
280-0035633-015	#15 680-112677-D-14-B		Client	voaWater	0.200000	mL	1.000000	
280-0035633-016	#16 280-69513-B-5-A		Client	voaWater	2.000000	mL	1.000000	
280-0035633-017	#17 280-69513-B-6-A		Client	voaWater	2.000000	mL	1.000000	
280-0035633-018	#18 680-112677-D-13-D		Client	voaWater	2.000000	mL	1.000000	
280-0035633-019	#19 680-112677-D-13-D MS		MS	voaWater	2.000000	mL	1.000000	
280-0035633-020	#20 680-112677-D-13-D MSD		MSD	voaWater	2.000000	mL	1.000000	
280-0035633-021	#21 680-112677-D-14-B		Client	voaWater	2.000000	mL	1.000000	
280-0035633-022	#22 CCVC		CCVC	voaWater	20.00	mL	1.000000	
280-0035633-023	#23 280-69327-C-1-A		Client	voaWater	0.200000	mL	1.000000	
280-0035633-024	#24 280-69327-C-3-A		Client	voaWater	2.000000	mL	1.000000	
280-0035633-025	#25 280-69327-C-5-A		Client	voaWater	0.200000	mL	1.000000	
280-0035633-026	#26 280-69327-C-7-A		Client	voaWater	1.000000	mL	1.000000	
280-0035633-027	#27 280-69327-C-9-A		Client	voaWater	2.000000	mL	1.000000	
280-0035633-028	#28 280-69488-D-1-A		Client	voaWater	1.000000	mL	1.000000	
280-0035633-029	#29 280-69516-B-1-A		Client	voaWater	0.200000	mL	1.000000	
280-0035633-030	#30 280-69516-B-2-A		Client	voaWater	0.200000	mL	1.000000	

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035633-031	#31 280-69327-C-1-A 		Client	vooWater	2.000000	mL	1.000000	
280-0035633-032	#32 280-69327-C-5-A 		Client	vooWater	2.000000	mL	1.000000	
280-0035633-033	#33 280-69327-C-7-A 		Client	vooWater	2.000000	mL	1.000000	
280-0035633-034	#34 280-69488-D-1-A 		Client	vooWater	2.000000	mL	1.000000	
280-0035633-035	#35 Samp 35  SAMP 35		Client	vooWater	20.00	mL	1.000000	

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

Instrument ID and Date: D0511015
Calibration Event 22332

ICAL Batch/ICV lines 277770 / 20 23
Work List 35095 2nd Day Batch/ICV lines /

Check Method Used: Analysis 624 8260B Other VOA _____
VOA Preparation 5mL 20mL 5035 Low 5035 High 5030 Low 5030 High

Initial Calibration	Review Items			Comments		
	Yes	No	N/A	Level 1	Level 2	
1. BFB meets criteria?	/	/	/	/	/	
2. ICAL date and instrument ID verified?	/	/	/	/	/	
3. Does the Form VI match the data in the Chrom source method?	/	/	/	/	/	
4. Sufficient number of calibration points used?	/	/	/	/	/	
5. Reasons for removal of points documented?	/	/	/	/	/	Some points < RL removed
6. %RSD or correlation coefficient within method limits?	/	/	/	/	/	
7. Response factors meet criteria?	/	/	/	/	/	
8. Isomeric pairs checked for correct peak assignment?						
Vinyl acetate/isopropyl ether						
1,3-/1,4-/1,2-Dichlorobenzene						
Ethy Benzene/Xylenes						
1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene						
2-Nitropropane between Bromodichloromethane & MIBK						
2-/4-Chlorotoluene / n-propylbenzene						
MIBK/2-Hexanone						
Methyl/Ethyl Methacrylate						
1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene						
1,1-Dichloropropane / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane						
9. Data checked for detector saturation?						
10. Label number of standards used recorded?	/	/	/	/	/	
11. Manual integrations documented and checked?	/	/	/	/	/	
12. ^{2nd} source ICV recovery 80-120% ($\pm 20\%$ drift) for DoD projects, 65-135% ($\pm 35\%$, or $\pm 55\%$ of expected for poor performers) for non-DoD? Exceptions noted in comment section.	/	/	/	/	/	

1st Level Reviewer: JAT

Date: 5/18/15

2nd Level Reviewer:

Date: 5/19/15

Revision 4
03/27/2013
\tafs\Lab\Denver\Admin\QA\Edit\FORMS\Data Review\MS VOA ICAL Rev 4.doc

Sequence Name: C:\HPCHEM\1\SEQUENCE\051615i.

Comment:

Operator: CONTRERASE

Data Path: C:\HPCHEM\1\DATA\051615\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run

(X) Full Method
() Reprocessing Only

On A Barcode Mismatch

(X) Inject Anyway
() Don't Inject

Test America Denver

Instrument:

OV-MS-001Q (8260/624) (Circle)

Purge Volume: (20mL/5mL/5g)

Tune Time: 10'50 - 16'.48 (Circle)

Sample ID: 277770

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P4170	BFB	10.50
2	Sample	10	P4171	8260	blk
3	Sample	11	P4172	8260	ic
4	Sample	12	P4173	8260	ic
5	Sample	13	P4174	8260	ic
6	Sample	14	P4175	8260	ic
7	Sample	15	P4176	8260	ic
8	Sample	16	P4177	8260	ic
9	Sample	17	P4178	8260	ic
10	Sample	18	P4179	8260	ic
11	Sample	19	P4180	8260	icv
12	Sample	20	P4181	8260	ic
13	Sample	21	P4182	8260	ic
14	Sample	22	P4183	8260	ic
15	Sample	23	P4184	8260	ic
16	Sample	24	P4185	8260	ic
17	Sample	25	P4186	8260	ic
18	Sample	26	P4187	8260	blk
19	Sample	27	P4188	8260	icv

16.48

TestAmerica Laboratories
Worklist Report

Worklist Name: 051615i
Instrument Name: VMS_P
Purge Volume: 20.00
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_P\20150516-35095.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MSP_VMS_P
Run Reagent: MV-567649-D_00001
Run Reagent: MV-ARCH SS A_00035

Worklist Number: 35095
Chrom Method: AQ_VMS_P_8260
Units: mL

Amount Added: 1.000000, Units: uL
Amount Added: 0.880000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035095-001	#1 BFB 	MV-BFB_00017	BFB		voaWater	1.000000	uL	1.000000
280-0035095-002	#2 CCV 	MV-567649-D_00001 MV-2cleve+AVA_00009	CCV		voaWater	20.00	mL	1.000000
280-0035095-003	#3 CCV 	MV-Supp A_00011	CCV		voaWater	20.00	mL	1.000000
280-0035095-004	#4 LCS 	MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020 MV-Main B_00009	LCS		voaWater	20.00	mL	1.000000
280-0035095-005	#5 LCSD 	MV-Main B_00009 MV-SS 2-Cleve_00020 MV-Gas/Ket B_00017	LCSD		voaWater	20.00	mL	1.000000
280-0035095-006	#6 MB 		MB		voaWater	20.00	mL	1.000000
280-0035095-007	#7 280-62974-A-1 		Client		voaWater	20.00	mL	1.000000
280-0035095-008	#8 280-62974-A-3 		Client		voaWater	20.00	mL	1.000000
280-0035095-009	#9 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022	IC	1	voaWater	20.00	mL	1.000000
280-0035095-010	#10 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022	IC	2	voaWater	20.00	mL	1.000000
280-0035095-011	#11 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022	IC	3	voaWater	20.00	mL	1.000000
280-0035095-012	#12 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022	IC	4	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035095-013	#13 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	5	voaWater	20.00	mL	1.000000
280-0035095-014	#14 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	6	voaWater	20.00	mL	1.000000
280-0035095-015	#15 ic 	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	7	voaWater	20.00	mL	1.000000
280-0035095-016	#16 icV 	MV-567649-D_00001 MV-Main B_00009 MV-SS 2-Cleve_00020 MV-Gas/Ket B_00017	ICV		voaWater	20.00	mL	1.000000
280-0035095-017	#17 ic 	MV-Supp A_00011 MV-ARCH SS A_00035 MV-567649-D_00001	IC	2	voaWater	20.00	mL	1.000000
280-0035095-018	#18 ic 	MV-Supp A_00011 MV-ARCH SS A_00035 MV-567649-D_00001	IC	3	voaWater	20.00	mL	1.000000
280-0035095-019	#19 ic 	MV-Supp A_00011 MV-ARCH SS A_00035 MV-567649-D_00001	IC	4	voaWater	20.00	mL	1.000000
280-0035095-020	#20 icIS 	MV-Supp A_00011 MV-ARCH SS A_00035 MV-567649-D_00001	ICIS	5	voaWater	20.00	mL	1.000000
280-0035095-021	#21 ic 	MV-Supp A_00011 MV-ARCH SS A_00035 MV-567649-D_00001	IC	6	voaWater	20.00	mL	1.000000
280-0035095-022	#22 ic 	MV-Supp A_00011 MV-ARCH SS A_00035 MV-567649-D_00001	IC	7	voaWater	20.00	mL	1.000000
280-0035095-023	#23 icV 	MV-567649-D_00001 MV-Supp B_00005 MV-ARCH SS A_00035	ICV		voaWater	20.00	mL	1.000000
280-0035095-024	#24 primer 		Client		voaWater	20.00	mL	1.000000
280-0035095-025	#25 primer 		Client		voaWater	20.00	mL	1.000000

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

TestAmerica
THE LEADERS IN ENVIRONMENTAL TESTING

MAIN

Instrument ID and Date: H 5-27-15
Calibration Event 22417

ICAL Batch/ICV lines 279265 ICV-22
Work List 35452 2nd Day Batch/ICV lines N/A

Check Method Used: Analysis 624 8260B Other VOA _____
VOA Preparation 5mL 20mL 5035 Low 5035 High 5030 Low 5030 High

Review Item	Level 1		Level 2		Comments
	Yes	No	N/A	N/A	
Initial Calibration					
1. BFB meets criteria?	/	/	/	/	
2. ICAL date and instrument ID verified?	/	/	/	/	
3. Does the Form VI match the data in the Chrom source method?	/	/	/	/	
4. Sufficient number of calibration points used?	/	/	/	/	Some points < RL removed
5. Reasons for removal of points documented?	/	/	/	/	
6. %RSD or correlation coefficient within method limits?	/	/	/	/	
7. Response factors meet criteria?					
8. Isomeric pairs checked for correct peak assignment?					
Vinyl acetate/Isopropyl ether					
1,3-/1,4-/1,2-Dichlorobenzene					
Ethylbenzene/Xylenes					
1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene	/				
2-Nitropropane between Bromodichloromethane & MIBK					
2-/4-Chlorotoluene / n-propylbenzene					
MIBK/2-Hexanone					
Methyl/Ethyl Methacrylate					
1,1-Dichloroethene /cis-1,2, & trans-1,2-Dichloroethene					
1,1-Dichloropropane / cis / tran -1,3-Dichloropropane					
9. Data checked for detector saturation?	/	/	/	/	
10. Label number of standards used recorded?	/	/	/	/	see below
11. Manual integrations documented and checked?					
12. 2 nd source ICV recoveries 80-120% ($\pm 20\%$ drift) for DOD projects	/	/	/	/	
65-135% ($\pm 35\%$, or $\pm 55\%$ of expected for poor performers) for non-DOD?					
Exceptions noted in comment section.					
1st Level Reviewer: <u>J. Bar</u>	Date: <u>5-28-15</u>		Not Good For AFCEE		
2nd Level Reviewer: <u>B. J.</u>	Date: <u>5-28-15</u>		Man. Int.		
			Chloromethane: level 2, 3		

Sequence Name: C:\HPCHEM\1\SEQUENCE\052715i.s
Comment:
Operator: BERGERB
Data Path: C:\HPCHEM\1\DATA\052715i\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
() Reprocessing Only

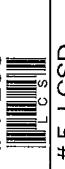
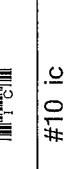
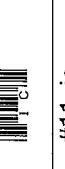
On A Barcode Mismatch
(X) Inject Anyway
() Don't Inject

TestAmerica Denver
Instrument: H
W-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mD)5mL/5g
(Circle)
Tune Time: 23/2 - 07:25
Tune Patch: 279265

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	62	H2944	8260	blank
2	Sample	63	H2945	8260	blank
3	Sample	100	H2946	BFB	bfb 23:12
4	Sample	1	H2947	8260	blank
5	Sample	2	H2948	8260	blank
6	Sample	3	H2949	8260	ic
7	Sample	4	H2950	8260	ic
8	Sample	5	H2951	8260	ic
9	Sample	6	H2952	8260	ic
10	Sample	7	H2953	8260	ic
11	Sample	8	H2954	8260	ic
12	Sample	9	H2955	8260	ic
13	Sample	10	H2956	8260	icv
14	Sample	11	H2957	8260	ic
15	Sample	12	H2958	8260	ic
16	Sample	13	H2959	8260	ic
17	Sample	14	H2960	8260	icis
18	Sample	15	H2961	8260	ic
19	Sample	16	H2962	8260	ic
20	Sample	17	H2963	8260	icv
21	Sample	18	H2964	8260	mdl v1
22	Sample	19	H2965	8260	mdl v2
23	Sample	20	H2966	8260	mdl v3
24	Sample	21	H2967	8260	mdl v4
25	Sample	22	H2968	8260	mdl v5 07:25

TestAmerica Laboratories
Worklist Report

Worklist Name: 052715i
Instrument Name: VMS_H
Purge Volume: 20.00
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_H\20150528-35452.b
Upload Directory: \\Corptialsapp06\280-DN-RawData\Organics\MISVMS_H
Run Reagent: MV-568718-D_00002
Run Reagent: MV-ARCH SS A_00042

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035452-001	#1 BFB 	MV-BFB_B_00018	BFB	voaWater	1.000000	uL	1.000000	
280-0035452-002	#2 CCV 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	CCV	voaWater	20.00	mL	1.000000	
280-0035452-003	#3 CCV 	MV-Supp A_00011	CCV	voaWater	20.00	mL	1.000000	
280-0035452-004	#4 LCS 	MV-Main B_00009 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020	LCS	voaWater	20.00	mL	1.000000	
280-0035452-005	#5 LCSD 	MV-Main B_00009 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020	LCSD	voaWater	20.00	mL	1.000000	
280-0035452-006	#6 MB 	MB	voaWater	20.00	mL	1.000000		
280-0035452-007	#7 280-62974-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035452-008	#8 280-62974-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035452-009	#9 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	1	voaWater	20.00	mL	1.000000
280-0035452-010	#10 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	2	voaWater	20.00	mL	1.000000
280-0035452-011	#11 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lv	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035452-012	#12 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	4	voaWater	20.00	mL	1.000000
280-0035452-013	#13 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	5	voaWater	20.00	mL	1.000000
280-0035452-014	#14 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	6	voaWater	20.00	mL	1.000000
280-0035452-015	#15 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	7	voaWater	20.00	mL	1.000000
280-0035452-016	#16 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	2	voaWater	20.00	mL	1.000000
280-0035452-017	#17 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	3	voaWater	20.00	mL	1.000000
280-0035452-018	#18 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	4	voaWater	20.00	mL	1.000000
280-0035452-019	#19 icis 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	ICIS	5	voaWater	20.00	mL	1.000000
280-0035452-020	#20 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	6	voaWater	20.00	mL	1.000000
280-0035452-021	#21 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	7	voaWater	20.00	mL	1.000000
280-0035452-022	#22 icv 	MV-568718-D_00002 MV-Main B_00009 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020	ICV		voaWater	20.00	mL	1.000000
280-0035452-023	#23 icv 	MV-568718-D_00002 MV-Supp B_00005 MV-ARCH SS A_00042	ICV		voaWater	20.00	mL	1.000000
280-0035452-024	#24 mdv1 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	Client		voaWater	20.00	mL	1.000000
280-0035452-025	#25 mdv2 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	Client		voaWater	20.00	mL	1.000000
280-0035452-026	#26 mdv3 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	Client		voaWater	20.00	mL	1.000000

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Instrument ID and Date: H 5-27-15
Calibration Event 22417

ICAL Batch/ICV lines 279265 225-71 N/A
2nd Day Batch/ICV lines N/A
Work List 35452

Check Method Used: Analysis 624 8260B Other VOA _____

VOA Preparation 5mL 20mL 5035 Low 5035 High 5030 Low 5030 High

Review Items	Initial Calibration		Level 1		Level 2		Comments
	Yes	No	N/A				
1. BFB meets criteria?	/	/	/	/	/	/	
2. ICAL date and instrument ID verified?	/	/	/	/	/	/	
3. Does the Form VI match the data in the Chrom source method?	/	/	/	/	/	/	
4. Sufficient number of calibration points used?	/	/	/	/	/	/	Some points < RL removed
5. Reasons for removal of points documented?	/	/	/	/	/	/	
6. %RSD or correlation coefficient within method limits?	/	/	/	/	/	/	
7. Response factors meet criteria?							
8. Isomeric pairs checked for correct peak assignment?							
Vinyl acetate/isopropyl ether							
1,3-/1,4-/1,2-Dichlorobenzene							
Ethylbenzene/Xylenes							
1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene							
2-Nitropropane between Bromodichloromethane & MIBK	/						
2-/4-Chlorotoluene / n-propylbenzene							
MIBK/2-Hexanone							
Methyl/Ethyl Methacrylate							
1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene							
1,1-Dichloropropane / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	/						
9. Data checked for detector saturation?	/	/	/	/	/	/	
10. Label number of standards used recorded?	/	/	/	/	/	/	See below
11. Manual integrations documented and checked?	/	/	/	/	/	/	Ethyl acetate -52% 1,4-dichlorobutene -22%
12. 2 nd source ICV recovery (±20% drift) for DoD projects? 65-135% (±35%, or ±55% of expected for poor performers) for non-DoD?	/	/	/	/	/	/	Exceptions noted in comment section.

—
st Level Reviewer:

Date: 5-28-13

End Level Reviewer: _____

Date: 5-28-15

Main Init.

acetonitrile = level 2,
 3
 ethanol = level 3,
 4
 isopropyl alcohol = level 6

Sequence Name: C:\HPCHEM\1\SEQUENCE\052715i.s
Comment:
Operator: BERGERB
Data Path: C:\HPCHEM\1\DATA\052715i\
Pre-Seq Cmd:
Post-Seq Cmd:

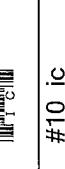
Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	62	H2944	8260	blank
2	Sample	63	H2945	8260	blank
3	Sample	100	H2946	BFB	bfb 23:12
4	Sample	1	H2947	8260	blank
5	Sample	2	H2948	8260	blank
6	Sample	3	H2949	8260	ic
7	Sample	4	H2950	8260	ic
8	Sample	5	H2951	8260	ic
9	Sample	6	H2952	8260	ic
10	Sample	7	H2953	8260	ic
11	Sample	8	H2954	8260	ic
12	Sample	9	H2955	8260	ic
13	Sample	10	H2956	8260	icv
14	Sample	11	H2957	8260	ic
15	Sample	12	H2958	8260	ic
16	Sample	13	H2959	8260	ic
17	Sample	14	H2960	8260	icis
18	Sample	15	H2961	8260	ic
19	Sample	16	H2962	8260	ic
20	Sample	17	H2963	8260	icv
21	Sample	18	H2964	8260	mdlvl1
22	Sample	19	H2965	8260	mdlvl2
23	Sample	20	H2966	8260	mdlvl3
24	Sample	21	H2967	8260	mdlvl4
25	Sample	22	H2968	8260	mdlvl5 07:25

TestAmerica Denver
Instrument: H
DW-MS-0010 (8260) (624) (Circle)
Purge Volume: (20mL)5mL/5g
(Circle)
Tune Time: 23:12 - 07:25
Tune Date: 279265

TestAmerica Laboratories
Worklist Report

Worklist Name: 052715
 Instrument Name: VMS_H
 Purge Volume: 20.00
 Analysis Type: VOA
 Batch Directory: \\Denchrom\ChromData\VMS_H\20150528-35452.b
 Upload Directory: \\Corptalsapp06280-DN-RawData\Organics\MSVMS_H
 Run Reagent: MV-568718-D_00002
 Run Reagent: MV-ARCH SS A_00042

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035452-001	#1 BFB 	MV-BFB_00018	BFB	voaWater	1.000000	uL	1.000000	
280-0035452-002	#2 CCV 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	CCV	voaWater	20.00	mL	1.000000	
280-0035452-003	#3 CCV 	MV-Supp A_00011	CCV	voaWater	20.00	mL	1.000000	
280-0035452-004	#4 LCS 	MV-Main B_00009 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020	LCS	voaWater	20.00	mL	1.000000	
280-0035452-005	#5 LCSD 	MV-Main B_00009 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020	LCSD	voaWater	20.00	mL	1.000000	
280-0035452-006	#6 MB 	MB	voaWater		20.00	mL	1.000000	
280-0035452-007	#7 280-62974-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035452-008	#8 280-62974-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035452-009	#9 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	1	voaWater	20.00	mL	1.000000
280-0035452-010	#10 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	2	voaWater	20.00	mL	1.000000
280-0035452-011	#11 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035452-012	#12 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	4	voaWater	20.00	mL	1.000000
280-0035452-013	#13 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	5	voaWater	20.00	mL	1.000000
280-0035452-014	#14 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	6	voaWater	20.00	mL	1.000000
280-0035452-015	#15 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	7	voaWater	20.00	mL	1.000000
280-0035452-016	#16 ic 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	IC	2	voaWater	20.00	mL	1.000000
280-0035452-017	#17 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	3	voaWater	20.00	mL	1.000000
280-0035452-018	#18 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	4	voaWater	20.00	mL	1.000000
280-0035452-019	#19 icis 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	ICIS	5	voaWater	20.00	mL	1.000000
280-0035452-020	#20 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	6	voaWater	20.00	mL	1.000000
280-0035452-021	#21 ic 	MV-568718-D_00002 MV-Supp A_00011 MV-ARCH SS A_00042	IC	7	voaWater	20.00	mL	1.000000
280-0035452-022	#22 icv 	MV-568718-D_00002 MV-Main B_00009 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00020	ICV		voaWater	20.00	mL	1.000000
280-0035452-023	#23 icv 	MV-568718-D_00002 MV-Supp B_00005 MV-ARCH SS A_00042	ICV		voaWater	20.00	mL	1.000000
280-0035452-024	#24 mdv1 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	Client		voaWater	20.00	mL	1.000000
280-0035452-025	#25 mdv2 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	Client		voaWater	20.00	mL	1.000000
280-0035452-026	#26 mdv3 	MV-568718-D_00002 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00009	Client		voaWater	20.00	mL	1.000000

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

Instrument ID and Date: P 0ef0z/15
Calibration Event 12477

Check Method Used: Analysis 624 8260B Other VOA

VOA Preparation 5mL 20mL 5035 Low 5035 High 5030 Low 5030 High

Initial Calibration	Review Items	Comments	
		Level 1 No.	Level 2 N/A
1. BFB meets criteria?	/	/	/
2. ICAL date and instrument ID verified?	/	/	/
3. Does the Form VI match the data in the Chrom source method?	/	/	/
4. Sufficient number of calibration points used?	/	/	Some points < RL removed
5. Reasons for removal of points documented?	/	/	
6. %RSD or correlation coefficient within method limits?	/	/	
7. Response factors meet criteria?	/		
8. Isomeric pairs checked for correct peak assignment? Viny acetate/Isopropyl ether 1,3-/1,4-/1,2-Dichlorobenzene Ethy benzene/Xylenes 1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2-/4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2, & trans-1,2-Dichloroethene 1,1-Dichloropropane / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane		/	
9. Data checked for detector saturation?	/	/	
10. Label number of standards used recorded?	/	/	
11. Manual integrations documented and checked?	/	/	
12. 2 nd source ICV recovery(80-120% (\pm 20%drift) for DoD projects, 65-135% (\pm 35%,or \pm 55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	/	/	NOT QS Dichlorofluoromethane + 20.9% Acrolin + 22.5%

1st Level Reviewer: ZSS Date: 06/03/15

2nd Level Reviewer: JAT Date: 06/03/15

Sequence Name: C:\HPCHEM\1\SEQUENCE\060215.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\060215\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

TestAmerica Denver
Instrument: P
DV-MS-0010 (2608624) (Circle)
Purge Volume: (20mL/minL/S)
(Circle)
Tune Time: 1121-244
Lims Run #: 279915

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P4773	BFB	BFB
2	Sample	10	P4774	8260	CCV
3	Sample	11	P4775	8260	CCV
4	Sample	100	P4776	BFB	BFB
5	Sample	10	P4777	8260	CCV
6	Sample	11	P4778	8260	CCV
7	Sample	100	P4779	BFB	BFB
8	Sample	10	P4780	8260	CCV
9	Sample	11	P4781	8260	STD003
10	Sample	12	P4782	8260	STD010
11	Sample	13	P4783	8260	STD020
12	Sample	14	P4784	8260	STD050
13	Sample	15	P4785	8260	STD10
14	Sample	16	P4786	8260	STD30
15	Sample	17	P4787	8260	STD60
16	Sample	18	P4788	8260	ICV
17	Sample	19	P4789	8260	ICV
18	Sample	20	P4790	8260	LCS
19	Sample	21	P4791	8260	MB
20	Sample	22	P4792	8260	280-69725-a-1 PH<2
21	Sample	23	P4793	8260	280-69725-a-2 PH<2
22	Sample	24	P4794	8260	280-69725-c-3 PH<2
23	Sample	25	P4795	8260	MB
24	Sample	26	P4796	8260	280-69725-a-4 PH<2
25	Sample	27	P4797	8260	280-69725-c-5 PH<2
26	Sample	28	P4798	8260	280-69763-b-47 PH<2
27	Sample	29	P4799	8260	280-69763-b-48 PH<2
28	Sample	30	P4800	8260	280-69763-b-49 PH<2
29	Sample	31	P4801	8260	280-69763-b-50 PH<2
30	Sample	32	P4802	8260	280-69763-b-51 PH<2
31	Sample	33	P4803	8260	280-69763-a-55 PH<2
32	Sample	34	P4804	8260	280-69763-a-56 PH<2
33	Sample	35	P4805	8260	280-69763-a-57 PH<2
34	Sample	36	P4806	8260	280-69763-a-58 PH<2
35	Sample	37	P4807	8260	280-69763-a-59 PH<2
36	Sample	38	P4808	8260	280-69725-c-4 pH2

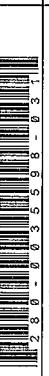
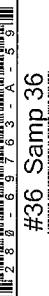
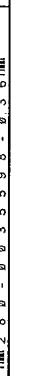
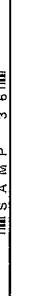
TestAmerica Laboratories
Worklist Report

Worklist Name: 060215i
Instrument Name: VMS_P
Purge Volume: 20.00
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_P\20150602-35598.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MSVMS_P
Run Reagent: MV-567649-D_00001
Run Reagent: MV-ARCH SS A_00035

Worklist Number: 35598
Chrom Method: AQ_VMSP_8260
Units: mL
Amount Added: 1.000000, Units: uL
Amount Added: 0.960000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lv	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035598-001	# 1 BFB 	MV-BFB_B_00017	BFB	voaWater	1.000000	uL	1.000000	
280-0035598-002	# 2 CCV 	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00033 MV-2cleve+AVA_00010	CCV	voaWater	20.00	mL	1.000000	
280-0035598-003	# 3 CCV 	MV-Supp A_00011	CCV	voaWater	20.00	mL	1.000000	
280-0035598-004	# 4 LCS 	MV-Gas/Ket B_00017 MV-Main B_00010 MV-SS 2-Cleve_00021	LCS	voaWater	20.00	mL	1.000000	
280-0035598-005	# 5 LCSD 	MV-Main B_00010 MV-Gas/Ket B_00017 MV-SS 2-Cleve_00021	LCSD	voaWater	20.00	mL	1.000000	
280-0035598-006	# 6 LCS 	MV-Supp B_00005	LCS	voaWater	20.00	mL	1.000000	
280-0035598-007	# 7 LCSD 	MV-Supp B_00005	LCSD	voaWater	20.00	mL	1.000000	
280-0035598-008	# 8 MB 		MB	voaWater	20.00	mL	1.000000	
280-0035598-009	# 9 280-62974-A-1 		Client	voaWater	20.00	mL	1.000000	
280-0035598-010	#10 280-62974-A-2 		Client	voaWater	20.00	mL	1.000000	
280-0035598-011	#11 280-62974-A-3 		Client	voaWater	20.00	mL	1.000000	
280-0035598-012	#12 STD003 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	1	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035598-013	#13 STD010 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	2	voaWater	20.00	mL	1.000000
280-0035598-014	#14 STD020 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	3	voaWater	20.00	mL	1.000000
280-0035598-015	#15 STD050 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	4	voaWater	20.00	mL	1.000000
280-0035598-016	#16 STD10 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	5	voaWater	20.00	mL	1.000000
280-0035598-017	#17 STD30 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	6	voaWater	20.00	mL	1.000000
280-0035598-018	#18 STD60 	MV-2cleve+AVA_00010 MV-Gas/Ket A_00033 MV-Main A_00022 MV-567649-D_00001	IC	7	voaWater	20.00	mL	1.000000
280-0035598-019	#19 ICV 	MV-SS 2-Cleve_00021 MV-Main B_00010 MV-567649-D_00001	ICV		voaWater	20.00	mL	1.000000
280-0035598-020	#20 ICV 	MV-Gas/Ket A_00033 MV-567649-D_00001	ICV		voaWater	20.00	mL	1.000000
280-0035598-021	#21 280-69725-A-1 		Client		voaWater	20.00	mL	1.000000
280-0035598-022	#22 280-69725-A-2 		Client		voaWater	20.00	mL	1.000000
280-0035598-023	#23 280-69725-C-3 		Client		voaWater	20.00	mL	1.000000
280-0035598-024	#24 280-69725-A-4 		Client		voaWater	20.00	mL	1.000000
280-0035598-025	#25 280-69725-C-5 		Client		voaWater	20.00	mL	1.000000
280-0035598-026	#26 280-69763-B-47 		Client		voaWater	20.00	mL	1.000000
280-0035598-027	#27 280-69763-B-48 		Client		voaWater	20.00	mL	1.000000
280-0035598-028	#28 280-69763-B-49 		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0035598-029 	#29 280-69763-B-50 			Client	voaWater	20.00	mL	1.000000
280-0035598-030 	#30 280-69763-B-51 			Client	voaWater	20.00	mL	1.000000
280-0035598-031 	#31 280-69763-A-55 			Client	voaWater	20.00	mL	1.000000
280-0035598-032 	#32 280-69763-A-56 			Client	voaWater	20.00	mL	1.000000
280-0035598-033 	#33 280-69763-A-57 			Client	voaWater	20.00	mL	1.000000
280-0035598-034 	#34 280-69763-A-58 			Client	voaWater	20.00	mL	1.000000
280-0035598-035 	#35 280-69763-A-59 			Client	voaWater	20.00	mL	1.000000
280-0035598-036 	#36 Samp 36  S.A.M.P. 36			Client	voaWater	20.00	mL	1.000000

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 278801

Batch Start Date: 05/22/15 15:33

Batch Analyst: Bourgery, David F

Batch Method: 1311

Batch End Date: 05/23/15 08:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	ExtractFluid					
LB 280-278801/1		1311, 8260B		T1					
LCS 280-278801/2		1311, 8260B		T1					
280-69513-B-5	54400-IDW01-0515	1311, 8260B	P	T1					
280-69513-B-6	54400-IDW02-0515	1311, 8260B	P	T1					

Batch Notes

First End time	5.23.15 845
First Start time	05/22/15 15:33

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Denver Job Number: 280-69513-1

SDG No.: _____

Project: GSI - McConnell Air Force Base, Kansas

Client Sample ID
54400-IDW01-0515
54400-IDW02-0515

Lab Sample ID
280-69513-5
280-69513-6

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TCLP

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG ID.:

Matrix: Solid

Date Sampled: 05/19/2015 16:30

Reporting Basis: WET

Date Received: 05/20/2015 08:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.075	0.50	0.075	0.022	mg/L	U		1	6010C
Barium	2.0	1.0	0.010	0.0020	mg/L			1	6010C
Cadmium	0.0090	0.10	0.0090	0.0020	mg/L	U		1	6010C
Chromium	0.0032	0.50	0.013	0.0030	mg/L	J		1	6010C
Lead	0.26	0.50	0.050	0.013	mg/L	J		1	6010C
Selenium	0.095	0.10	0.095	0.024	mg/L	U		1	6010C
Silver	0.018	0.50	0.018	0.0040	mg/L	U		1	6010C
Mercury	0.000080	0.0020	0.000080	0.000030	mg/L	U	Q	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TCLP

Client Sample ID: 54400-IDW02-0515

Lab Sample ID: 280-69513-6

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG ID.:

Matrix: Solid

Date Sampled: 05/19/2015 16:35

Reporting Basis: WET

Date Received: 05/20/2015 08:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.075	0.50	0.075	0.022	mg/L	U		1	6010C
Barium	2.0	1.0	0.010	0.0020	mg/L			1	6010C
Cadmium	0.0053	0.10	0.0090	0.0020	mg/L	J		1	6010C
Chromium	0.0036	0.50	0.013	0.0030	mg/L	J		1	6010C
Lead	0.057	0.50	0.050	0.013	mg/L	J		1	6010C
Selenium	0.095	0.10	0.095	0.024	mg/L	U		1	6010C
Silver	0.018	0.50	0.018	0.0040	mg/L	U		1	6010C
Mercury	0.000080	0.0020	0.000080	0.000030	mg/L	U	Q	1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP ICV_00029 Concentration Units: mg/L

CCV Source: ICP CCV_00039

Analyte	ICV 280-279481/7 05/28/2015 08:39				CCV 280-279481/77 05/29/2015 00:35				CCV 280-279481/89 05/29/2015 01:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Barium	0.238	J	0.250	95	0.483	J	0.500	97	0.491	J	0.500	98
Cadmium	0.250		0.250	100	0.499		0.500	100	0.494		0.500	99
Chromium	0.243	J	0.250	97	0.509		0.500	102	0.507		0.500	101
Silver	0.247	J	0.250	99	0.492	J	0.500	98	0.488	J	0.500	98
<i>Arsenic</i>	0.243	J	0.250	97	0.990		1.00	99	0.988		1.00	99
<i>Lead</i>	0.252	J	0.250	101	1.01		1.00	101	1.01		1.00	101
<i>Selenium</i>	0.493		0.500	99	0.997		1.00	100	0.992		1.00	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP LLCCV_01470 Concentration Units: mg/L

CCV Source: ICP LLCCV_01470

Analyte	ICVL 280-279481/10 05/28/2015 08:49				CCVL 280-279481/79 05/29/2015 00:40				CCVL 280-279481/91 05/29/2015 01:12			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Barium	0.00971	J	0.0100	97	0.00976	J	0.0100	98	0.0102	J	0.0100	102
Cadmium	0.00504	J	0.00500	101	0.00519	J	0.00500	104	0.00529	J	0.00500	106
Chromium	0.0103	J	0.0100	103	0.0107	J	0.0100	107	0.0105	J	0.0100	105
Silver	0.00995	J	0.0100	100	0.0101	J	0.0100	101	0.0104	J	0.0100	104
<i>Arsenic</i>	0.075	U	0.0150	93	0.075	U	0.0150	97				
<i>Lead</i>	0.050	U	0.00900	96	0.050	U	0.00900	97	0.050	U	0.00900	85
<i>Selenium</i>	0.095	U	0.0150	123	0.095	U	0.0150	116				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP ICV_00029 Concentration Units: mg/L

CCV Source: ICP CCV_00040

Analyte	ICV 280-279689/8 05/30/2015 12:03				ICV 280-279689/9 05/30/2015 12:05				CCV 280-279689/25 05/30/2015 14:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	0.249	J	0.250	99	0.252	J	0.250	101	1.02		1.00	102
Selenium	0.495		0.500	99	0.494		0.500	99	1.03		1.00	103
<i>Arsenic</i>	0.242	J	0.250	97	0.246	J	0.250	99	1.03		1.00	103
<i>Barium</i>	0.245	J	0.250	98	0.244	J	0.250	98	0.489	J	0.500	98
<i>Cadmium</i>	0.247		0.250	99	0.250		0.250	100	0.519		0.500	104
<i>Chromium</i>	0.255	J	0.250	102	0.256	J	0.250	102	0.520		0.500	104
<i>Silver</i>	0.243	J	0.250	97	0.243	J	0.250	97	0.505		0.500	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP ICV_00029 Concentration Units: mg/L

CCV Source: ICP CCV_00040

Analyte	CCV 280-279689/39 05/30/2015 15:07											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	1.01		1.00	101								
Selenium	1.01		1.00	101								
<i>Arsenic</i>	1.02		1.00	102								
<i>Barium</i>	0.496	J	0.500	99								
<i>Cadmium</i>	0.518		0.500	104								
<i>Chromium</i>	0.513		0.500	103								
<i>Silver</i>	0.505		0.500	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP LLCCV_01472 Concentration Units: mg/L

CCV Source: ICP LLCCV_01472

Analyte	ICVL 280-279689/10 05/30/2015 12:11				CCVL 280-279689/27 05/30/2015 14:23				CCVL 280-279689/41 05/30/2015 15:12			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	0.050	U	0.00900	111	0.050	U	0.00900	89	0.050	U	0.00900	96
Selenium	0.095	U	0.0150	117	0.095	U	0.0150	105	0.095	U	0.0150	103
<i>Arsenic</i>	0.075	U	0.0150	101					0.075	U	0.0150	103
<i>Barium</i>	0.0104	J	0.0100	104	0.00979	J	0.0100	98	0.00988	J	0.0100	99
<i>Cadmium</i>	0.00514	J	0.00500	103	0.00533	J	0.00500	107	0.00542	J	0.00500	108
<i>Chromium</i>	0.0108	J	0.0100	108	0.0109	J	0.0100	109	0.0108	J	0.0100	108
<i>Silver</i>	0.0100	J	0.0100	100	0.00970	J	0.0100	97	0.0104	J	0.0100	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP ICV_00029 Concentration Units: mg/L

CCV Source: ICP CCV_00040

Analyte	ICV 280-279916/7 06/01/2015 10:57				CCV 280-279916/17 06/01/2015 11:27				CCV 280-279916/31 06/01/2015 12:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.238	J	0.250	95	0.987		1.00	99	0.961		1.00	96
<i>Barium</i>	0.238	J	0.250	95	0.490	J	0.500	98	0.488	J	0.500	98
<i>Cadmium</i>	0.248		0.250	99	0.498		0.500	100	0.484		0.500	97
<i>Chromium</i>	0.242	J	0.250	97	0.496	J	0.500	99	0.465	J	0.500	93
<i>Lead</i>	0.251	J	0.250	101	1.00		1.00	100	0.973		1.00	97
<i>Selenium</i>	0.473		0.500	95	0.972		1.00	97	0.915		1.00	91
<i>Silver</i>	0.244	J	0.250	98	0.501		0.500	100	0.495	J	0.500	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: ICP LLCCV_01473 Concentration Units: mg/L

CCV Source: ICP LLCCV_01473

Analyte	ICVL 280-279916/8 06/01/2015 11:00				CCVL 280-279916/19 06/01/2015 11:32				CCVL 280-279916/33 06/01/2015 12:11			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.075	U	0.0150	102	0.075	U	0.0150	107	0.075	U	0.0150	86
<i>Barium</i>	0.0105	J	0.0100	105	0.0106	J	0.0100	106	0.0105	J	0.0100	105
<i>Cadmium</i>	0.00505	J	0.00500	101	0.00511	J	0.00500	102	0.00479	J	0.00500	96
<i>Chromium</i>	0.0103	J	0.0100	103	0.0104	J	0.0100	104	0.00980	J	0.0100	98
<i>Lead</i>	0.050	U	0.00900	95	0.050	U	0.00900	108	0.050	U	0.00900	111
<i>Silver</i>	0.00969	J	0.0100	97	0.00931	J	0.0100	93	0.00983	J	0.0100	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: Hg H2O ICV_00912 Concentration Units: mg/L

CCV Source: Hg H2O CCV_00117

Analyte	ICV 280-279184/9 05/26/2015 16:24				CCV 280-279184/14 05/26/2015 16:44				CCV 280-279184/38 05/26/2015 17:42			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00401		0.00400	100	0.00556		0.00500	111	0.00555		0.00500	111

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: Hg H2O ICV_00912 Concentration Units: mg/L

CCV Source: Hg H2O CCV_00117

Analyte	CCV 280-279184/50 05/26/2015 18:09				CCV 280-279184/63 05/26/2015 18:46				CCV 280-279184/64 05/26/2015 18:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00498		0.00500	100	0.00526		0.00500	105	0.00508		0.00500	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

ICV Source: Hg H2O ICV_00912 Concentration Units: mg/L

CCV Source: Hg H2O CCV_00117

Analyte	CCV 280-279184/173 05/27/2015 10:53				CCV 280-279184/183 05/27/2015 11:16							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00547		0.00500	109	0.00553		0.00500	111				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-279481/14 Concentration Units: mg/L

CRQL Check Standard Source: ICP CRI_00087

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Barium	0.00500	0.00463	J	93	80-120
Cadmium	0.00500	0.00525	J	105	80-120
Chromium	0.0100	0.0103	J	103	80-120
Silver	0.0100	0.00941	J	94	80-120

Lab Sample ID: CRI 280-279689/14 Concentration Units: mg/L

CRQL Check Standard Source: ICP CRI_00089

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Barium	0.00500	0.00490	J	98	80-120
Cadmium	0.00500	0.00504	J	101	80-120
Chromium	0.0100	0.0104	J	104	80-120
Selenium	0.0100	0.095	U	97	80-120
Silver	0.0100	0.00950	J	95	80-120

Lab Sample ID: CRI 280-279689/15 Concentration Units: mg/L

CRQL Check Standard Source: Alt AsPbSbTh_00002

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	0.0100	0.075	U	85	80-120
Lead	0.00900	0.050	U	95	80-120

Lab Sample ID: CRI 280-279916/12 Concentration Units: mg/L

CRQL Check Standard Source: ICP CRI_00090

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	0.0100	0.075	U	92	80-120
Barium	0.00500	0.00508	J	102	80-120
Cadmium	0.00500	0.00497	J	99	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-279916/12 Concentration Units: mg/L

CRQL Check Standard Source: ICP CRI_00090

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Chromium	0.0100	0.00977	J	98	80-120
Silver	0.0100	0.0110	J	110	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICB 280-279481/13 05/28/2015 08:58		CCB 280-279481/78 05/29/2015 00:38		CCB 280-279481/90 05/29/2015 01:09			
		Found	C	Found	C	Found	C	Found	C
Barium	1.0	0.010	U	0.010	U	0.010	U		
Cadmium	0.10	0.0090	U	0.0090	U	0.0090	U		
Chromium	0.50	0.013	U	0.013	U	0.013	U		
Silver	0.50	0.018	U	0.018	U	0.018	U		
<i>Arsenic</i>	0.50	0.075	U	0.075	U	0.075	U		
<i>Lead</i>	0.50	0.050	U	0.050	U	0.050	U		
<i>Selenium</i>	0.10	0.095	U	0.095	U	0.095	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICB 280-279689/13 05/30/2015 12:19		CCB 280-279689/26 05/30/2015 14:21		CCB 280-279689/40 05/30/2015 15:09			
		Found	C	Found	C	Found	C	Found	C
Lead	0.50	0.050	U	0.050	U	0.050	U		
Selenium	0.10	0.095	U	0.095	U	0.095	U		
<i>Arsenic</i>	0.50	0.075	U	0.075	U	0.075	U		
<i>Barium</i>	1.0	0.010	U	0.010	U	0.010	U		
<i>Cadmium</i>	0.10	0.0090	U	0.0090	U	0.0090	U		
<i>Chromium</i>	0.50	0.013	U	0.013	U	0.013	U		
<i>Silver</i>	0.50	0.018	U	0.018	U	0.018	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICB 280-279916/11 06/01/2015 11:08		CCB 280-279916/18 06/01/2015 11:29		CCB 280-279916/32 06/01/2015 12:08			
		Found	C	Found	C	Found	C	Found	C
Arsenic	0.50	0.075	U	0.075	U	0.075	U		
<i>Barium</i>	1.0	0.010	U	0.010	U	0.010	U		
<i>Cadmium</i>	0.10	0.0090	U	0.0090	U	0.0090	U		
<i>Chromium</i>	0.50	0.013	U	0.013	U	0.013	U		
<i>Lead</i>	0.50	0.050	U	0.050	U	0.050	U		
<i>Selenium</i>	0.10	0.095	U	0.095	U	0.095	U		
<i>Silver</i>	0.50	0.018	U	0.018	U	0.018	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICB 280-279184/10 05/26/2015 16:27		CCB 280-279184/15 05/26/2015 16:46		CCB 280-279184/39 05/26/2015 17:44		CCB 280-279184/51 05/26/2015 18:12	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.0020	0.000080	U	0.000080	U	0.000080	U	0.000080	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	CCB 280-279184/65 05/26/2015 18:51		CCB 280-279184/174 05/27/2015 10:55		CCB 280-279184/184 05/27/2015 11:19			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.0020	0.000080	U	0.000080	U	0.000080	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L Lab Sample ID: LB 280-278466/1-F

Instrument Code: MT_025 Batch No.: 279481

CAS No.	Analyte	Concentration	C	Q	Method
7440-39-3	Barium	0.00385	J		6010C_DOD5
7440-43-9	Cadmium	0.0090	U		6010C_DOD5
7440-47-3	Chromium	0.013	U		6010C_DOD5
7440-22-4	Silver	0.018	U		6010C_DOD5

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Lab Sample ID: LB 280-278466/1-F

Instrument Code: MT_025

Batch No.: 279689

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	0.102	J		6010C_DOD5
7782-49-2	Selenium	0.095	U		6010C_DOD5

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L Lab Sample ID: LB 280-278466/1-F

Instrument Code: MT_025 Batch No.: 279916

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.075	U		6010C_DOD5

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Concentration Units: mg/L

Lab Sample ID: LB 280-278466/1-E

Instrument Code: MT_034

Batch No.: 279184

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.000080	U		7470A_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICSA 280-279481/17 Instrument ID: MT_025
Lab File ID: 25D052815.asc ICS Source: ICP ICSA_00104
Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Barium		0.0001	
Cadmium		0.0001	
Chromium		0.0032	
Silver		0.0000	
<i>Aluminum</i>	500	511	102
<i>Antimony</i>		-0.0029	
<i>Arsenic</i>		-0.0055	
<i>Beryllium</i>		-0.0002	
<i>Calcium</i>	500	450	90
<i>Cobalt</i>		0.0004	
<i>Copper</i>		-0.0007	
<i>Iron</i>	200	185	93
<i>Lead</i>		0.0037	
<i>Lithium</i>		0.0061	
<i>Magnesium</i>	500	520	104
<i>Manganese</i>		0.0011	
<i>Molybdenum</i>		-0.0060	
<i>Nickel</i>		0.0095	
<i>Potassium</i>		-0.0451	
<i>Selenium</i>		0.0166	
<i>Sodium</i>		0.0324	
<i>Thallium</i>		-0.0091	
<i>Vanadium</i>		0.0016	
<i>Zinc</i>		0.0010	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICSAB 280-279481/18 Instrument ID: MT_025
Lab File ID: 25D052815.asc ICS Source: ICP ICSAB_00109
Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Barium	0.500	0.476	95
Cadmium	1.00	1.04	104
Chromium	0.500	0.424	85
Silver	1.00	1.05	105
<i>Aluminum</i>	500	507	101
<i>Antimony</i>	1.00	0.975	97
<i>Arsenic</i>	2.00	1.96	98
<i>Beryllium</i>	0.500	0.463	93
<i>Calcium</i>	500	446	89
<i>Cobalt</i>	0.500	0.445	89
<i>Copper</i>	0.500	0.512	102
<i>Iron</i>	200	184	92
<i>Lead</i>	1.00	0.900	90
<i>Lithium</i>	1.00	0.961	96
<i>Magnesium</i>	500	508	102
<i>Manganese</i>	0.500	0.492	98
<i>Molybdenum</i>	1.00	0.902	90
<i>Nickel</i>	1.00	0.903	90
<i>Potassium</i>	50.0	48.0	96
<i>Selenium</i>	5.00	4.83	97
<i>Sodium</i>	50.0	48.7	97
<i>Thallium</i>	10.0	8.34	83
<i>Vanadium</i>	0.500	0.515	103
<i>Zinc</i>	1.00	0.954	95

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICSA 280-279689/17 Instrument ID: MT_025
Lab File ID: 26b053015.asc ICS Source: ICP ICSA_00104
Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Lead		0.0057	
Selenium		0.0064	
Aluminum	500	511	102
Antimony		-0.0090	
Arsenic		0.0065	
Barium		0.0002	
Beryllium		-0.0003	
Cadmium		-0.0006	
Calcium	500	465	93
Chromium		0.0041	
Cobalt		-0.0003	
Copper		-0.0006	
Iron	200	183	91
Lithium		0.0025	
Magnesium	500	504	101
Manganese		0.0012	
Molybdenum		-0.0054	
Nickel		0.0086	
Potassium		-0.157	
Silver		0.0002	
Sodium		0.0212	
Thallium		-0.0102	
Vanadium		0.0007	
Zinc		0.0025	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICSAB 280-279689/18 Instrument ID: MT_025
Lab File ID: 26b053015.asc ICS Source: ICP ICSAB_00109
Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Lead	1.00	0.925	92
Selenium	5.00	4.82	96
<i>Aluminum</i>	500	503	101
<i>Antimony</i>	1.00	0.968	97
<i>Arsenic</i>	2.00	1.94	97
<i>Barium</i>	0.500	0.492	98
<i>Beryllium</i>	0.500	0.470	94
<i>Cadmium</i>	1.00	1.01	101
<i>Calcium</i>	500	462	92
<i>Chromium</i>	0.500	0.444	89
<i>Cobalt</i>	0.500	0.459	92
<i>Copper</i>	0.500	0.512	102
<i>Iron</i>	200	180	90
<i>Lithium</i>	1.00	0.989	99
<i>Magnesium</i>	500	499	100
<i>Manganese</i>	0.500	0.481	96
<i>Molybdenum</i>	1.00	0.920	92
<i>Nickel</i>	1.00	0.913	91
<i>Potassium</i>	50.0	49.8	100
<i>Silver</i>	1.00	1.05	105
<i>Sodium</i>	50.0	50.2	100
<i>Thallium</i>	10.0	8.46	85
<i>Vanadium</i>	0.500	0.497	99
<i>Zinc</i>	1.00	0.917	92

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICSA 280-279916/13 Instrument ID: MT_025
Lab File ID: 25A060115.asc ICS Source: ICP ICSA_00104
Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		0.0007	
Aluminum	500	518	104
Antimony		-0.0113	
Barium		0.0003	
Beryllium		-0.0001	
Cadmium		-0.0007	
Calcium	500	471	94
Chromium		0.0036	
Cobalt		0.0004	
Copper		0.0016	
Iron	200	182	91
Lead		0.0076	
Lithium		0.0063	
Magnesium	500	510	102
Manganese		0.0012	
Molybdenum		-0.0058	
Nickel		0.0092	
Potassium		0.104	
Selenium		0.0026	
Silver		-0.0001	
Sodium		0.0335	
Thallium		-0.0075	
Vanadium		0.0023	
Zinc		0.0014	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Lab Sample ID: ICSAB 280-279916/14 Instrument ID: MT_025
Lab File ID: 25A060115.asc ICS Source: ICP ICSAB_00109
Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Arsenic	2.00	1.92	96
Aluminum	500	512	102
Antimony	1.00	0.943	94
Barium	0.500	0.495	99
Beryllium	0.500	0.475	95
Cadmium	1.00	1.01	101
Calcium	500	462	92
Chromium	0.500	0.421	84
Cobalt	0.500	0.455	91
Copper	0.500	0.511	102
Iron	200	179	90
Lead	1.00	0.906	91
Lithium	1.00	1.01	101
Magnesium	500	500	100
Manganese	0.500	0.486	97
Molybdenum	1.00	0.907	91
Nickel	1.00	0.923	92
Potassium	50.0	51.0	102
Selenium	5.00	4.65	93
Silver	1.00	1.06	106
Sodium	50.0	49.6	99
Thallium	10.0	8.26	83
Vanadium	0.500	0.502	100
Zinc	1.00	0.939	94

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
 MATRIX SPIKE SAMPLE RECOVERY
 METALS - TCLP

Client ID: 54400-IDW02-0515 MS

Lab ID: 280-69513-6 MS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/L

% Solids: _____

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	3.93	0.075 U	4.00	98	80-120		6010C
Barium	13.3	2.0	12.0	94	80-120		6010C
Cadmium	1.09	0.0053 J	1.10	99	80-120		6010C
Chromium	4.72	0.0036 J	5.20	91	80-120		6010C
Lead	5.29	0.057 J	5.50	95	80-120		6010C
Selenium	3.04	0.095 U	3.00	101	80-120		6010C
Silver	1.01	0.018 U	1.05	97	80-120		6010C
Mercury	0.00528	0.000080 U	0.00500	106	90-116		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
 METALS - TCLP

Client ID: 54400-IDW02-0515 MSD

Lab ID: 280-69513-6 MSD

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/L

% Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	3.74	4.00	94	80-120	5	20		6010C
Barium	12.3	12.0	86	80-120	7	20		6010C
Cadmium	1.02	1.10	92	80-120	7	20		6010C
Chromium	4.45	5.20	86	80-120	6	20		6010C
Lead	4.96	5.50	89	80-120	6	20		6010C
Selenium	2.88	3.00	96	80-120	6	20		6010C
Silver	0.946	1.05	90	80-120	7	20		6010C
Mercury	0.00535	0.00500	107	90-116	1	10		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
 POST DIGESTION SPIKE SAMPLE RECOVERY
 METALS - TCLP

Client ID: 54400-IDW02-0515 PDS

Lab ID: 280-69513-6 PDS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/L

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method		
Arsenic	0.981	0.075	U	1.00	98	80-120		6010C	
Barium	2.43	2.0		0.500	95	80-120		6010C	
Cadmium	0.253	0.0053	J	0.250	99	80-120		6010C	
Chromium	0.235	J	0.0036	J	0.250	92	80-120		6010C
Lead	0.525		0.057	J	0.500	94	80-120		6010C
Selenium	1.05		0.095	U	1.00	105	80-120		6010C
Silver	0.219	J	0.018	U	0.250	87	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TCLP

Lab ID: LCS 280-278466/2-F

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Sample Matrix: Solid

LCS Source: TCLP Spike_00011

Analyte	Solid (mg/L)						
	True	Found	C	%R	Limits	Q	Method
Barium	12.0	12.1		101	80	120	
Cadmium	1.10	1.15		105	80	120	
Chromium	5.20	5.13		99	80	120	
Silver	1.05	1.08		103	80	120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TCLP

Lab ID: LCS 280-278466/2-F

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Sample Matrix: Solid

LCS Source: TCLP Spike_00011

Analyte	Solid (mg/L)						
	True	Found	C	%R	Limits	Q	Method
Lead	5.50	5.68		103	80 120		6010C
Selenium	3.00	3.21		107	80 120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TCLP

Lab ID: LCS 280-278466/2-F

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Sample Matrix: Solid

LCS Source: TCLP Spike_00011

Analyte	Solid (mg/L)						
	True	Found	C	%R	Limits	Q	Method
Arsenic	4.00	4.14		104	80 | 120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TCLP

Lab ID: LCS 280-278466/2-E

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

Sample Matrix: Solid

LCS Source: Hg Daily Spk_01378

Analyte	Solid (mg/L)						
	True	Found	C	%R	Limits	Q	Method
Mercury	0.00500	0.00725		145	90 | 116	Q	7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TCLP

Lab ID: 280-69513-6

SDG No: _____

Lab Name: TestAmerica Denver Job No: 280-69513-1

Matrix: Solid Concentration Units: mg/L

Analyte	Initial Sample Result (I) C		Serial Dilution Result (S) C		% Difference	Q	Method
Arsenic	0.075	U	0.38	U	NC		6010C
Barium	2.0		1.91	J	NC	D	6010C
Cadmium	0.0053	J	0.045	U	NC		6010C
Chromium	0.0036	J	0.065	U	NC		6010C
Lead	0.057	J	0.0658	J	NC	D	6010C
Selenium	0.095	U	0.48	U	NC		6010C
Silver	0.018	U	0.088	U	NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: MT_025

Method: 6010C

DL Date: 02/26/2014 11:11

Prep Method: 3010A

Leach Method: 1311

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Arsenic	189	0.5	0.022
Barium	455.4	1	0.002
Cadmium	228.8	0.1	0.002
Chromium	205.5	0.5	0.003
Lead	220.3	0.5	0.013
Selenium	196	0.1	0.024
Silver	328	0.5	0.004

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: MT_025

Method: 6010C

XMDL Date: 02/26/2014 11:14

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Arsenic		0.5	0.022
Barium		1	0.0025
Cadmium		0.1	0.002
Chromium		0.5	0.003
Lead		0.5	0.013
Selenium		0.1	0.024
Silver		0.5	0.004

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: MT_034

Method: 7470A

DL Date: 02/26/2014 11:16

Prep Method: 7470A

Leach Method: 1311

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Mercury	253.7	0.002	0.00003

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: MT_034

Method: 7470A

XMDL Date: 02/26/2014 11:36

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
<u>Mercury</u>		0.002	0.00003

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG No.: _____

ICP-AES Instrument ID: MT_025

Date: 12/12/2014

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Aluminum	167.079													0.001460	
Aluminum	309.271														
Antimony	206.833		-0.000024					-0.000023			0.008162			-0.000047	
Arsenic	189.042		-0.000043								-0.006918			-0.000020	
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061		-0.000012			-0.001206			-0.000016			0.001346		0.000178	
Boron	208.959														
Cadmium	228.802			0.013281		-0.000082				0.000036				-0.000013	
Calcium	317.933									0.000391					
Chromium	205.552						-0.001150							0.000010	
Cobalt	228.616					0.000052					0.000001				
Copper	324.754													0.000010	
Iron	259.940									0.070287					
Iron	271.441									0.076500					
Lead	220.353		-0.000100					-0.000040	0.000004		-0.000553		0.000657	0.000002	
Lithium	670.784								0.000013						
Magnesium	279.079													0.000240	
Manganese	257.610		0.000001											0.000009	
Molybdenum	202.030														
Nickel	231.604						-0.000094		-0.000002		0.000105			0.000005	
Phosphorus	178.284		0.000002												
Potassium	766.490														
Selenium	196.090		-0.000007					-0.000007						-0.000013	
Silicon	288.158										-0.012859				
Silver	328.068														
Sodium	589.592														
Sodium	818.326														
Strontium	407.771							0.000049							
Sulfur	182.034		-0.000003					-0.000025							

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 12/12/2014

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Thallium	190.856		0.000004							0.001360	0.000274		-0.000039		
Thorium	283.730									-0.000514		-0.000153		0.000635	
Tin	189.989														
Titanium	334.904							0.000005			0.000255				
Uranium	370.152				0.002411			-0.000039			-0.001869		-0.000245		
Vanadium	292.402											-0.002416		0.000009	
Zinc	206.200		0.000002					-0.000075				-0.000468		0.000007	
Zirconium	339.198													-0.000018	

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/12/2014

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Aluminum	309.271		0.001655												
Aluminum	167.079														
Antimony	206.833				-0.021002		-0.000024					0.000031		0.000093	
Arsenic	189.042		-0.000003		-0.000744										
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061													-0.001095	
Boron	208.959				0.034200										
Cadmium	228.802														
Calcium	317.933														
Chromium	205.552				0.000377		0.000035								
Cobalt	228.616			-0.000001	-0.000914		0.000125								
Copper	324.754				0.000377										
Iron	259.940		-0.000894												
Iron	271.441		-0.000894												
Lead	220.353				-0.001334		0.000027					0.000353			
Lithium	670.784		0.000001												
Magnesium	279.079			-0.002066											
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604				0.000080										
Phosphorus	178.284				-0.004340										
Potassium	766.490														
Selenium	196.090			0.000474											
Silicon	288.158				-0.000415										
Silver	328.068			0.000114	-0.000424										
Sodium	818.326														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034			-0.000231	-0.009013										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 12/12/2014

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Thallium	190.856			0.000104											
Thorium	283.730		-0.000008		0.000266		0.000116								
Tin	189.989														
Titanium	334.904		0.000001		0.000700										
Uranium	370.152														
Vanadium	292.402		-0.000020	-0.000132	-0.002250										
Zinc	206.200				0.000123										
Zirconium	339.198				0.000270										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/12/2014

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr								
Aluminum	167.079															
Aluminum	309.271															
Antimony	206.833		0.000329		-0.002400	0.000070		-0.000720								
Arsenic	189.042	-0.000781														
Barium	455.403							0.000705								
Beryllium	313.042		-0.000468			0.000770										
Bismuth	223.061		-		-0.005130											
Boron	208.959															
Cadmium	228.802				-0.000172											
Calcium	317.933	-0.006047														
Chromium	205.552	0.002490	-0.000200		-0.000210	0.000270		-0.000710								
Cobalt	228.616		0.002060		0.000180											
Copper	324.754	0.0038	-0.000200		-0.000990	-0.000414		-0.006744								
Iron	259.940					-0.209500										
Iron	271.441					-0.209000	-0.033000	-0.033								
Lead	220.353		-0.000027		0.000725			-0.000255								
Lithium	670.784															
Magnesium	279.079	-0.016400	-0.001812		-0.002700											
Manganese	257.610	-0.000636			0.000099											
Molybdenum	202.030				-0.000094											
Nickel	231.604															
Phosphorus	178.284				0.000030											
Potassium	766.490															
Selenium	196.090	-0.0000432		-0.000481	-0.000758											
Silicon	288.158															
Silver	328.068	0.001040			0.001028			0.009298								
Sodium	589.592															
Sodium	818.326															
Strontium	407.771															
Sulfur	182.034	0.000409				0.000164										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/12/2014

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr								
Thallium	190.856	-0.000005	-0.001115		0.000038	0.000980										
Thorium	283.730				0.023			0.0204								
Tin	189.989	-0.000123	-0.001890		0.000171											
Titanium	334.904	0.007800			-0.000731											
Uranium	370.152		0.007353													
Vanadium	292.402	0.001370	0.000262		-0.001180											
Zinc	206.200		0.000066													
Zirconium	339.198	0.053100			-0.000206											

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Denver

Job No: 280-69513-1

SDG No.: _____

Instrument ID: MT_025 Date: 03/30/2015 12:02

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Arsenic		50	6010C
Barium		50	6010C
Cadmium		25	6010C
Chromium		50	6010C
Lead		200	6010C
Selenium		50	6010C
Silver		2	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 280-278466/1-F	05/28/2015 15:15	279206		10	50
LCS 280-278466/2-F	05/28/2015 15:15	279206		10	50
280-69513-5	05/28/2015 15:15	279206		10	50
280-69513-6	05/28/2015 15:15	279206		10	50
280-69513-6 MS	05/28/2015 15:15	279206		10	50
280-69513-6 MSD	05/28/2015 15:15	279206		10	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 280-278466/1-E	05/26/2015 11:00	278942		30	30
LCS 280-278466/2-E	05/26/2015 11:00	278942		30	30
280-69513-5	05/26/2015 11:00	278942		30	30
280-69513-6	05/26/2015 11:00	278942		30	30
280-69513-6 MS	05/26/2015 11:00	278942		30	30
280-69513-6 MSD	05/26/2015 11:00	278942		30	30

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.:

Instrument ID: MT 025 Method: 6010C

Start Date: 05/28/2015 08:23 End Date: 05/29/2015 02:33

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.:

Instrument ID: MT 025 Method: 6010C

Start Date: 05/28/2015 08:23 End Date: 05/29/2015 02:33

Lab Sample ID	D / F	T y p e	Time	Analytes								
				A g	B a	C d	C r					
ZZZZZZ			23:09									
ZZZZZZ			23:12									
CCVH 280-279481/45			23:14									
CCV 280-279481/46			23:17									
CCB 280-279481/47			23:19									
ZZZZZZ			23:22									
ZZZZZZ			23:24									
ZZZZZZ			23:27									
ZZZZZZ			23:29									
ZZZZZZ			23:32									
ZZZZZZ			23:34									
ZZZZZZ			23:37									
CCVH 280-279481/55			23:39									
CCV 280-279481/56			23:42									
CCB 280-279481/57			23:44									
ZZZZZZ			23:47									
ZZZZZZ			23:49									
ZZZZZZ			23:52									
ZZZZZZ			23:54									
ZZZZZZ			23:57									
ZZZZZZ			00:00									
CCVH 280-279481/64			00:02									
CCV 280-279481/65			00:05									
CCB 280-279481/66			00:07									
CCVL 280-279481/67			00:10									
ZZZZZZ			00:12									
ZZZZZZ			00:15									
ZZZZZZ			00:17									
ZZZZZZ			00:20									
ZZZZZZ			00:23									
ZZZZZZ			00:25									
ZZZZZZ			00:27									
ZZZZZZ			00:30									
CCVH 280-279481/76	1		00:33	X	X	X	X					
CCV 280-279481/77	1		00:35	X	X	X	X					
CCB 280-279481/78	1		00:38	X	X	X	X					
CCVL 280-279481/79	1		00:40	X	X	X	X					
LB 280-278466/1-F	1	P	00:43	X	X	X	X					
LCS 280-278466/2-F	1	P	00:46	X	X	X	X					
280-69513-5	1	P	00:48	X	X	X	X					
280-69513-6	1	P	00:51	X	X	X	X					
280-69513-6 SD	5	P	00:54	X	X	X	X					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Instrument ID: MT_025 Method: 6010C

Start Date: 05/28/2015 08:23 End Date: 05/29/2015 02:33

Lab Sample ID	D / F	T Y p e	Time	Analytes								
				A g	B a	C d	C r					
280-69513-6 MS	1	P	00:56	X	X	X	X					
280-69513-6 MSD	1	P	00:59	X	X	X	X					
280-69513-6 PDS	1	P	01:02	X	X	X	X					
CCVH 280-279481/88	1		01:04	X	X	X	X					
CCV 280-279481/89	1		01:07	X	X	X	X					
CCB 280-279481/90	1		01:09	X	X	X	X					
CCVL 280-279481/91	1		01:12	X	X	X	X					
ZZZZZZ			01:15									
ZZZZZZ			01:17									
ZZZZZZ			01:20									
ZZZZZZ			01:23									
ZZZZZZ			01:26									
ZZZZZZ			01:28									
ZZZZZZ			01:31									
ZZZZZZ			01:34									
CCVH 280-279481/100			01:37									
CCV 280-279481/101			01:39									
CCB 280-279481/102			01:42									
CCVL 280-279481/103			01:44									
ZZZZZZ			01:47									
ZZZZZZ			01:49									
ZZZZZZ			01:52									
ZZZZZZ			01:54									
ZZZZZZ			01:57									
ZZZZZZ			01:59									
CCVH 280-279481/110			02:02									
CCV 280-279481/111			02:05									
CCB 280-279481/112			02:07									
ZZZZZZ			02:09									
ZZZZZZ			02:12									
ZZZZZZ			02:15									
ZZZZZZ			02:18									
ZZZZZZ			02:20									
ZZZZZZ			02:23									
CCVH 280-279481/119			02:26									
CCV 280-279481/120			02:28									
CCB 280-279481/121			02:31									
ZZZZZZ			02:33									

Prep Types

P = TCLP

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Instrument ID: MT_025 Method: 6010C

Start Date: 05/30/2015 11:31 End Date: 05/30/2015 17:44

Lab Sample ID	D / F	T Y p e	Time	Analytes												
				P b	S e											
ICIS 280-279689/1	1		11:31	X	X											
IC 280-279689/2			11:34	X	X											
IC 280-279689/3			11:36	X	X											
ZZZZZZ			11:39													
ZZZZZZ			11:41													
ICVH 280-279689/6	1		11:45	X	X											
ZZZZZZ			11:49													
ICV 280-279689/8	1		12:03	X	X											
ICV 280-279689/9	1		12:05	X	X											
ICVL 280-279689/10	1		12:11	X	X											
CCVH 280-279689/11			12:14													
CCV 280-279689/12			12:16													
ICB 280-279689/13	1		12:19	X	X											
CRI 280-279689/14	1		12:22		X											
CRI 280-279689/15	1		12:31	X												
ZZZZZZ			12:38													
ICSA 280-279689/17	1		12:43	X	X											
ICSAB 280-279689/18	1		12:49	X	X											
LRA 280-279689/19			12:52													
CCVH 280-279689/20			12:55													
CCV 280-279689/21			12:58													
CCB 280-279689/22			13:00													
CCVL 280-279689/23			13:02													
CCVH 280-279689/24	1		14:16	X	X											
CCV 280-279689/25	1		14:18	X	X											
CCB 280-279689/26	1		14:21	X	X											
CCVL 280-279689/27	1		14:23	X	X											
LB 280-278466/1-F	1	P	14:37	X	X											
LCS 280-278466/2-F	1	P	14:40	X	X											
280-69513-5	1	P	14:42	X	X											
280-69513-6	1	P	14:45	X	X											
280-69513-6 SD	5	P	14:48	X	X											
280-69513-6 MS	1	P	14:51	X	X											
280-69513-6 MSD	1	P	14:53	X	X											
280-69513-6 PDS	1	P	14:56	X	X											
ZZZZZZ			14:59													
ZZZZZZ			15:01													
CCVH 280-279689/38	1		15:04	X	X											
CCV 280-279689/39	1		15:07	X	X											
CCB 280-279689/40	1		15:09	X	X											
CCVL 280-279689/41	1		15:12	X	X											
ZZZZZZ			15:14													

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Instrument ID: MT_025 Method: 6010C

Start Date: 05/30/2015 11:31 End Date: 05/30/2015 17:44

Lab Sample ID	D / F	T Y p e	Time	Analytes												
				P b	S e											
ZZZZZZ			15:17													
ZZZZZZ			15:20													
ZZZZZZ			15:23													
ZZZZZZ			15:25													
CCVH 280-279689/47			15:28													
CCV 280-279689/48			15:31													
CCB 280-279689/49			15:33													
CCVL 280-279689/50			15:36													
ZZZZZZ			15:38													
ZZZZZZ			15:41													
ZZZZZZ			15:43													
ZZZZZZ			15:46													
ZZZZZZ			15:49													
ZZZZZZ			15:51													
ZZZZZZ			15:53													
ZZZZZZ			15:56													
ZZZZZZ			15:59													
ZZZZZZ			16:01													
CCVH 280-279689/61			16:04													
CCV 280-279689/62			16:07													
CCB 280-279689/63			16:09													
CCVL 280-279689/64			16:11													
ZZZZZZ			16:14													
ZZZZZZ			16:17													
ZZZZZZ			16:19													
ZZZZZZ			16:22													
CCVH 280-279689/69			16:25													
CCV 280-279689/70			16:27													
CCB 280-279689/71			16:30													
CCVL 280-279689/72			16:32													
ZZZZZZ			16:35													
ZZZZZZ			16:37													
ZZZZZZ			16:40													
ZZZZZZ			16:42													
ZZZZZZ			16:45													
ZZZZZZ			16:47													
ZZZZZZ			16:50													
ZZZZZZ			16:52													
ZZZZZZ			16:55													
CCVH 280-279689/82			16:58													
CCV 280-279689/83			17:00													
CCB 280-279689/84			17:03													

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.:

Instrument ID: MT 025 Method: 6010C

Start Date: 05/30/2015 11:31 End Date: 05/30/2015 17:44

Prep Types

P = TCLP

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Instrument ID: MT_025 Method: 6010C
Start Date: 06/01/2015 10:41 End Date: 06/01/2015 13:45

Lab Sample ID	D / F	T Y p e	Time	Analytes												
				A s												
ICIS 280-279916/1	1		10:41	X												
IC 280-279916/2			10:44	X												
IC 280-279916/3			10:46	X												
ZZZZZZ			10:49													
ZZZZZZ			10:51													
ICVH 280-279916/6	1		10:54	X												
ICV 280-279916/7	1		10:57	X												
ICVL 280-279916/8	1		11:00	X												
CCVH 280-279916/9			11:03													
CCV 280-279916/10			11:06													
ICB 280-279916/11	1		11:08	X												
CRI 280-279916/12	1		11:11	X												
ICSA 280-279916/13	1		11:14	X												
ICSAB 280-279916/14	1		11:19	X												
LRA 280-279916/15			11:21													
CCVH 280-279916/16	1		11:24	X												
CCV 280-279916/17	1		11:27	X												
CCB 280-279916/18	1		11:29	X												
CCVL 280-279916/19	1		11:32	X												
LB 280-278466/1-F	1	P	11:36	X												
LCS 280-278466/2-F	1	P	11:39	X												
280-69513-5	1	P	11:42	X												
280-69513-6	1	P	11:44	X												
280-69513-6 SD	5	P	11:47	X												
280-69513-6 MS	1	P	11:50	X												
280-69513-6 MSD	1	P	11:52	X												
280-69513-6 PDS	1	P	11:55	X												
ZZZZZZ			11:58													
ZZZZZZ			12:01													
CCVH 280-279916/30	1		12:03	X												
CCV 280-279916/31	1		12:06	X												
CCB 280-279916/32	1		12:08	X												
CCVL 280-279916/33	1		12:11	X												
ZZZZZZ			12:14													
ZZZZZZ			12:17													
ZZZZZZ			12:19													
ZZZZZZ			12:22													
ZZZZZZ			12:25													
ZZZZZZ			12:27													
ZZZZZZ			12:30													
ZZZZZZ			12:33													
CCVH 280-279916/42			12:35													

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Instrument ID: MT_025 Method: 6010C

Start Date: 06/01/2015 10:41 End Date: 06/01/2015 13:45

Lab Sample ID	D / F	T Y p e	Time	Analytes												
				A	s											
CCV 280-279916/43			12:38													
CCB 280-279916/44			12:40													
CCVL 280-279916/45			12:47													
ZZZZZZ			12:51													
ZZZZZZ			12:53													
ZZZZZZ			12:55													
ZZZZZZ			12:58													
ZZZZZZ			13:01													
ZZZZZZ			13:03													
ZZZZZZ			13:06													
CCVH 280-279916/53			13:08													
CCV 280-279916/54			13:11													
CCB 280-279916/55			13:13													
CCVL 280-279916/56			13:16													
ZZZZZZ			13:23													
ZZZZZZ			13:25													
ZZZZZZ			13:27													
ZZZZZZ			13:30													
ZZZZZZ			13:32													
ZZZZZZ			13:35													
CCVH 280-279916/63			13:37													
CCV 280-279916/64			13:40													
CCB 280-279916/65			13:42													
CCVL 280-279916/66			13:45													

Prep Types

P = TCLP

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Instrument ID: MT_034 Method: 7470A
Start Date: 05/26/2015 16:06 End Date: 05/27/2015 11:19

Lab Sample ID	D / F	T Y p e	Time	Analytes											
				Hg											
STD0 280-279184/1 IC			16:06	X											
STD1 280-279184/2 IC			16:08	X											
STD2 280-279184/3 IC			16:10	X											
STD3 280-279184/4 IC			16:13	X											
STD4 280-279184/5 IC			16:15	X											
STD5 280-279184/6 IC			16:17	X											
STD6 280-279184/7 IC			16:20	X											
STD7 280-279184/8 IC			16:22	X											
ICV 280-279184/9	1		16:24	X											
ICB 280-279184/10	1		16:27	X											
CRA 280-279184/11			16:29												
ZZZZZZ			16:37												
CCV 280-279184/13			16:41												
CCV 280-279184/14	1		16:44	X											
CCB 280-279184/15	1		16:46	X											
ZZZZZZ			16:48												
ZZZZZZ			16:50												
ZZZZZZ			16:53												
ZZZZZZ			16:55												
ZZZZZZ			16:57												
ZZZZZZ			17:00												
ZZZZZZ			17:02												
ZZZZZZ			17:04												
ZZZZZZ			17:07												
ZZZZZZ			17:09												
CCV 280-279184/26			17:14												
CCB 280-279184/27			17:16												
ZZZZZZ			17:19												
ZZZZZZ			17:21												
ZZZZZZ			17:23												
ZZZZZZ			17:25												
ZZZZZZ			17:28												
ZZZZZZ			17:30												
ZZZZZZ			17:32												
ZZZZZZ			17:35												
ZZZZZZ			17:37												
ZZZZZZ			17:39												
CCV 280-279184/38	1		17:42	X											
CCB 280-279184/39	1		17:44	X											
LB 280-278466/1-E	1	P	17:46	X											
ZZZZZZ			17:48												
ZZZZZZ			17:51												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Instrument ID: MT_034 Method: 7470A
Start Date: 05/26/2015 16:06 End Date: 05/27/2015 11:19

Lab Sample ID	D / F	T Y p e	Time	Analytes											
				Hg											
ZZZZZZ			17:53												
ZZZZZZ			17:55												
ZZZZZZ			17:58												
ZZZZZZ			18:00												
ZZZZZZ			18:02												
ZZZZZZ			18:05												
ZZZZZZ			18:07												
CCV 280-279184/50	1		18:09	X											
CCB 280-279184/51	1		18:12	X											
280-69513-5	1	P	18:14	X											
280-69513-6	1	P	18:16	X											
280-69513-6 MS	1	P	18:18	X											
280-69513-6 MSD	1	P	18:21	X											
ZZZZZZ			18:23												
ZZZZZZ			18:25												
ZZZZZZ			18:28												
ZZZZZZ			18:30												
ZZZZZZ			18:32												
ZZZZZZ			18:35												
ZZZZZZ			18:37												
CCV 280-279184/63	1		18:46	X											
CCV 280-279184/64	1		18:48	X											
CCB 280-279184/65	1		18:51	X											
ZZZZZZ			18:53												
ZZZZZZ			18:55												
ZZZZZZ			18:58												
ZZZZZZ			19:00												
ZZZZZZ			19:02												
ZZZZZZ			19:05												
ZZZZZZ			19:07												
ZZZZZZ			19:09												
ZZZZZZ			19:12												
ZZZZZZ			19:14												
CCV 280-279184/76			19:16												
CCB 280-279184/77			19:18												
ZZZZZZ			19:21												
ZZZZZZ			19:23												
ZZZZZZ			19:25												
ZZZZZZ			19:28												
ZZZZZZ			19:30												
ZZZZZZ			19:32												
ZZZZZZ			19:35												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Instrument ID: MT_034 Method: 7470A
Start Date: 05/26/2015 16:06 End Date: 05/27/2015 11:19

Lab Sample ID	D / F	T Y p e	Time	Analytes											
				Hg											
ZZZZZ			19:37												
ZZZZZ			19:39												
ZZZZZ			19:42												
CCV 280-279184/88			19:44												
CCB 280-279184/89			19:46												
ZZZZZ			19:48												
ZZZZZ			19:51												
ZZZZZ			19:53												
ZZZZZ			19:55												
ZZZZZ			19:58												
ZZZZZ			20:00												
ZZZZZ			20:02												
ZZZZZ			20:05												
ZZZZZ			20:07												
ZZZZZ			20:09												
CCV 280-279184/100			20:12												
CCB 280-279184/101			20:14												
ZZZZZ			20:16												
ZZZZZ			20:19												
ZZZZZ			20:21												
ZZZZZ			20:23												
ZZZZZ			20:25												
ZZZZZ			20:28												
CCV 280-279184/108			20:30												
CCB 280-279184/109			20:32												
ZZZZZ			20:35												
ZZZZZ			20:37												
ZZZZZ			20:39												
ZZZZZ			20:42												
ZZZZZ			20:53												
ZZZZZ			20:56												
ZZZZZ			20:58												
ZZZZZ			21:00												
ZZZZZ			21:04												
ZZZZZ			21:07												
CCV 280-279184/120			21:09												
CCB 280-279184/121			21:12												
ZZZZZ			21:14												
ZZZZZ			21:16												
ZZZZZ			21:19												
ZZZZZ			21:21												
ZZZZZ			21:23												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1
SDG No.: _____
Instrument ID: MT_034 Method: 7470A
Start Date: 05/26/2015 16:06 End Date: 05/27/2015 11:19

Lab Sample ID	D / F	T Y p e	Time	Analytes											
				Hg											
ZZZZZZ			21:26												
ZZZZZZ			21:28												
ZZZZZZ			21:31												
ZZZZZZ			21:33												
ZZZZZZ			21:35												
ZZZZZZ			07:24												
ZZZZZZ			07:26												
CCV 280-279184/134			07:29												
CCB 280-279184/135			07:31												
ZZZZZZ			07:33												
ZZZZZZ			07:35												
ZZZZZZ			07:38												
ZZZZZZ			07:40												
ZZZZZZ			07:42												
ZZZZZZ			07:45												
ZZZZZZ			07:47												
ZZZZZZ			07:49												
ZZZZZZ			07:52												
CCV 280-279184/145			07:54												
CCB 280-279184/146			07:56												
ZZZZZZ			07:59												
ZZZZZZ			08:01												
ZZZZZZ			08:03												
ZZZZZZ			08:05												
ZZZZZZ			08:08												
ZZZZZZ			08:10												
ZZZZZZ			08:12												
ZZZZZZ			08:15												
ZZZZZZ			08:17												
ZZZZZZ			08:19												
CCV 280-279184/157			08:45												
CCV 280-279184/158			08:47												
CCB 280-279184/159			08:49												
ZZZZZZ			08:52												
ZZZZZZ			08:54												
ZZZZZZ			08:56												
CCV 280-279184/163			08:59												
CCB 280-279184/164			09:01												
CCV 280-279184/165			10:24												
CCB 280-279184/166			10:26												
ZZZZZZ			10:28												
ZZZZZZ			10:32												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Instrument ID: MT_034 Method: 7470A

Start Date: 05/26/2015 16:06 End Date: 05/27/2015 11:19

Lab Sample ID	D / F	T Y p e	Time	Analytes															
				Hg															
ZZZZZ			10:35																
ZZZZZ			10:37																
ZZZZZ			10:39																
CCV 280-279184/172			10:50																
CCV 280-279184/173	1		10:53	X															
CCB 280-279184/174	1		10:55	X															
ZZZZZ			10:57																
ZZZZZ			11:00																
ZZZZZ			11:02																
ZZZZZ			11:05																
ZZZZZ			11:07																
ZZZZZ			11:09																
ZZZZZ			11:12																
LCS 280-278466/2-E	1	P	11:14	X															
CCV 280-279184/183	1		11:16	X															
CCB 280-279184/184	1		11:19	X															

Prep Types

P = TCLP

Sample Name: ICIS Acquired: 5/28/2015 8:23:36 Type: Cal
 Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-0.0064	.00078	-.00453	-.00005	.00039	.00296	-.00990	-.00054	.00518	-.00082	-.00018	.87964
Stddev	.00001	.00001	.00015	.00018	.00015	.00052	.00042	.00000	.00032	.00022	.00024	.55858
%RSD	2.0656	1.8749	3.2543	365.39	37.117	17.590	4.2772	.79859	6.2654	26.430	136.59	63.501
#1	-.00063	.00077	-.00442	.00008	.00050	.00259	-.00960	-.00054	.00495	-.00098	-.00001	.48466
#2	-.00065	.00079	-.00463	-.00018	.00029	.00332	-.01020	-.00054	.00541	-.00067	-.00035	1.2746
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00169	.00224	.00021	.00251	-.00331	.00004	.00020	-.00014	.00536	-.01719	-.00110	-.00002
Stddev	.00017	.00042	.00019	.00128	.00007	.00001	.00009	.00005	.00117	.00157	.00000	.00000
%RSD	10.321	18.621	92.768	51.140	2.0741	12.575	46.659	37.886	21.812	9.1558	.19875	8.7022
#1	.00182	.00195	.00007	.00160	-.00327	.00004	.00013	-.00018	.00453	-.01608	-.00110	-.00002
#2	.00157	.00254	.00035	.00342	-.00336	.00005	.00027	-.00010	.00618	-.01830	-.00110	-.00002
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00084	-.00084	.00014	.00015	.00126	.00126	.00000	-.00389	.00001	-.00025	-.00015	-.00007
Stddev	.00009	.00009	.00022	.00000	.00020	.00020	.00001	.00067	.00002	.00003	.00004	.00004
%RSD	10.260	10.276	161.69	2.7786	15.919	15.919	7300.3	17.142	198.76	10.496	24.818	59.111
#1	-.00090	-.00078	-.00002	.00014	.00112	.00112	.00009	-.00342	.00000	-.00027	-.00018	-.00004
#2	-.00078	-.00090	.00030	.00015	.00140	.00140	-.00009	-.00436	.00003	-.00023	-.00013	-.00009
Elem	V_2924	Zn2062	Zr3391									
Units	Cts/S	Cts/S	Cts/S									
Avg	-.00052	.00002	-.00417									
Stddev	.00012	.00002	.00026									
%RSD	23.284	96.660	6.3045									
#1	-.00043	.00001	-.00435									
#2	-.00060	.00003	-.00398									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	3270.1	56201.	5619.3									
Stddev	7.4	35.	43.6									
%RSD	.22702	.06155	.77534									
#1	3264.9	56226.	5650.1									
#2	3275.4	56177.	5588.5									

Sample Name: ICAL1 Acquired: 5/28/2015 8:25:59 Type: Cal
 Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.17843	.23479	.07990	.24431	5.1517	6.2268	1.6811	1.5565	.89215	3057.3	.26763	.72014	3.7520
Stddev	.00054	.00061	.00026	.00041	.0100	.0099	.0057	.0006	.00221	.7	.00098	.00212	.0087
%RSD	.30446	.26134	.32139	.16817	.19312	.15908	.34190	.03871	.24813	.02236	.36613	.29425	.23250
#1	.17882	.23435	.07972	.24460	5.1587	6.2338	1.6851	1.5561	.89058	3057.8	.26833	.72164	3.7582
#2	.17805	.23522	.08008	.24402	5.1446	6.2197	1.6770	1.5569	.89371	3056.8	.26694	.71865	3.7459
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.0950	.65728	1.0024	.46470	1.5953	.69328	.08756	.42871	.16665	.06912	.27268	.27268	.20209
Stddev	.0033	.00057	.0000	.00037	.0034	.00063	.00003	.00035	.00020	.00013	.00052	.00052	.00102
%RSD	.15918	.08669	.00078	.07945	.21464	.09071	.03834	.08178	.12294	.19378	.18930	.18930	.50270
#1	2.0974	.65688	1.0024	.46444	1.5977	.69284	.08758	.42896	.16680	.06922	.27305	.27305	.20138
#2	2.0927	.65768	1.0024	.46497	1.5929	.69373	.08754	.42847	.16651	.06903	.27232	.27232	.20281
Elem	Sr4077	Ti3349	TI1908	V_2924	Zn2062	Zr3391							
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S							
Avg	9.9219	.27912	.15605	.16530	.01925	.34633							
Stddev	.0238	.00039	.00010	.00006	.00014	.00086							
%RSD	.23982	.13811	.06172	.03481	.74947	.24842							
#1	9.9387	.27885	.15599	.16526	.01935	.34694							
#2	9.9050	.27939	.15612	.16534	.01915	.34573							
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3285.2	55169.	5630.8										
Stddev	3.4	18.	50.3										
%RSD	.10292	.03193	.89383										
#1	3287.6	55156.	5595.2										
#2	3282.8	55181.	5666.3										

Sample Name: ICAL2 Acquired: 5/28/2015 8:28:26 Type: Cal
Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.1435	.26492	.63119	2.2648	.23838	.46034	.12083
Stddev	.0308	.00180	.00354	.0095	.00100	.00076	.00053
%RSD	.98029	.67951	.56058	.41809	.42121	.16556	.43579
#1	3.1653	.26619	.63369	2.2714	.23909	.45980	.12045
#2	3.1217	.26365	.62869	2.2581	.23767	.46088	.12120
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	3148.5	52227.	5386.5				
Stddev	16.4	17.	125.5				
%RSD	.51985	.03228	2.3300				
#1	3136.9	52215.	5297.8				
#2	3160.1	52239.	5475.3				

Sample Name: s1-3290289 Acquired: 5/28/2015 8:31:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99810	1.0113	2.0027	1.0009	.99590	.99828	-.00394	10.015	1.0028	.99509	.99242	.99175	5.0516
Stddev	.00145	.0003	.0006	.0026	.00384	.00502	.00200	.043	.0002	.00269	.00301	.00033	.0107
%RSD	.14486	.02455	.02989	.25481	.38551	.50310	.50.745	.43079	.01905	.27039	.30344	.03378	.21195
#1	.99912	1.0115	2.0032	.99906	.99862	1.0018	-.00536	10.045	1.0027	.99319	.99454	.99151	5.0592
#2	.99708	1.0111	2.0023	1.0027	.99319	.99473	-.00253	9.9841	1.0030	.99700	.99029	.99198	5.0440

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	99.813	1.9968	39.901	1.0020	1.0013	10.097	10.260	.99378	2.0043	2.0022	.00957	1.9907	2.0038
Stddev	.222	.0049	.024	.0004	.0041	.026	.191	.00039	.0196	.0011	.00475	.0045	.0103
%RSD	.22207	.24282	.05985	.04187	.40932	.25991	.1.8589	.03967	.97643	.05638	.49.632	.22422	.51217
#1	99.970	2.0002	39.884	1.0023	.99838	10.116	10.125	.99350	1.9904	2.0014	.01293	1.9876	1.9965
#2	99.656	1.9934	39.918	1.0017	1.0042	10.078	10.395	.99405	2.0181	2.0030	.00621	1.9939	2.0110

Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass					
Value Range														

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391		
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
Avg	10.111	21.638	2.0024	.99722	-.00998	.99785	1.9880	-.02856	1.0044	1.0127	1.0034		
Stddev	.002	.004	.0074	.00353	.00027	.00091	.0062	.01748	.0011	.0007	.0012		
%RSD	.01734	.01734	.36781	.35432	.2.6942	.09162	.31287	.61.226	.10556	.06707	.11648		
#1	10.112	21.641	1.9972	.99972	-.00979	.99849	1.9924	-.01619	1.0052	1.0132	1.0025		
#2	10.110	21.635	2.0076	.99472	-.01017	.99720	1.9836	-.04092	1.0037	1.0122	1.0042		

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range												

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3264.2	55347.	5658.4										
Stddev	16.3	10.	32.4										
%RSD	.49935	.01718	.57214										
#1	3275.7	55340.	5635.5										
#2	3252.6	55354.	5681.3										

Sample Name: s2-3283794 Acquired: 5/28/2015 8:33:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.01147	100.13	-.00329	.00283	.00122	.00025	2.0178	.07115	-.00054	-.00110	.00133	.00507	99.998
Stddev	.00111	.78	.00075	.00173	.00019	.00006	.0062	.00288	.00026	.00015	.00016	.00026	1.022
%RSD	9.6419	.77484	22.963	61.012	15.961	26.009	.30679	4.0445	47.918	13.877	12.364	5.2155	1.0219
#1	-.01069	99.581	-.00275	.00161	.00108	.00020	2.0222	.06912	-.00036	-.00120	.00121	.00526	99.275
#2	-.01225	100.68	-.00382	.00405	.00136	.00029	2.0135	.07319	-.00073	-.00099	.00144	.00488	100.72

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.13090	.00322	.08893	-.00252	-.00023	496.49	.00492	.01002	.00310	10.159	-.02113	.01453	-.04676
Stddev	.01918	.00092	.01104	.00004	.00021	5.56	.00087	.00186	.00110	.031	.00022	.00083	.00199
%RSD	14.652	28.600	12.416	1.6981	93.886	1.1205	17.738	18.556	35.430	.30164	1.0314	5.6963	4.2458
#1	.14446	.00388	.08113	-.00249	-.00038	492.56	.00554	.00871	.00388	10.180	-.02098	.01511	-.04536
#2	.11733	.00257	.09674	-.00256	-.00008	500.43	.00430	.01134	.00233	10.137	-.02129	.01394	-.04817

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.10007	-.00332	.00083	10.006	-.02762	.00375	20.109	.00605	.00235	-.24915
Stddev	.00425	.00147	.00002	.003	.00030	.00284	.143	.00003	.00006	.00045
%RSD	4.2458	44.372	1.8939	.02505	1.0784	75.668	.71016	.55177	2.3756	.18133
#1	-.09707	-.00436	.00085	10.007	-.02783	.00175	20.008	.00607	.00231	-.24883
#2	-.10308	-.00228	.00082	10.004	-.02741	.00576	20.210	.00602	.00239	-.24947

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3171.8	52807.	5597.1
Stddev	16.6	340.	71.9
%RSD	.52384	.64449	1.2837
#1	3183.5	52566.	5647.9
#2	3160.0	53048.	5546.3

Sample Name: ICVH-3289305 Acquired: 5/28/2015 8:36:50 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00256	40.196	-.00356	-.00090	.00064	-.00003	.50695	.01408	.00005	.00006	.00031	.00063	79.244
Stddev	.00030	.486	.00239	.00108	.00040	.00007	.00333	.00485	.00005	.00005	.00018	.00035	.660
%RSD	11.863	1.2088	67.008	119.94	62.246	274.68	.65654	34.479	85.923	81.118	56.498	55.487	.83258
#1	-.00235	39.853	-.00187	-.00166	.00036	-.00007	.50930	.01751	.00002	.00002	.00044	.00088	78.778
#2	-.00278	40.540	-.00525	-.00014	.00092	.00002	.50459	.01064	.00008	.00009	.00019	.00038	79.711
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.02570	.00253	.01871	-.00026	-.00086	40.565	.00317	.00157	-.00007	3.9247	-.00914	.00707	-.01330
Stddev	.06344	.00009	.00362	.00001	.00001	.384	.00038	.00152	.00022	.0016	.00119	.00137	.00188
%RSD	246.90	3.6473	19.339	5.2594	1.4537	.94776	11.960	96.650	311.54	.04119	13.026	19.443	14.160
#1	-.07056	.00247	.02126	-.00025	-.00085	40.836	.00290	.00050	.00009	3.9258	-.00999	.00804	-.01463
#2	.01917	.00260	.01615	-.00027	-.00086	40.293	.00344	.00265	-.00023	3.9235	-.00830	.00610	-.01197
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.02847	-.00023	.00021	2.9442	-.00880	.00375	5.1545	.00185	-.00096	-.07472			
Stddev	.00403	.00048	.00008	.0080	.00012	.00043	.0306	.00052	.00089	.00029			
%RSD	14.160	207.34	37.527	.27255	1.4049	11.480	.59392	28.149	92.726	.38242			
#1	-.03132	.00011	.00016	2.9386	-.00888	.00405	5.1329	.00149	-.00033	-.07492			
#2	-.02562	-.00057	.00027	2.9499	-.00871	.00344	5.1762	.00222	-.00158	-.07451			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3314.1	55567.	5680.5										
Stddev	8.8	2.	74.1										
%RSD	.26699	.00278	1.3038										
#1	3320.3	55569.	5732.8										
#2	3307.8	55566.	5628.1										

Sample Name: ICV-3289337 Acquired: 5/28/2015 8:39:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.24692	.26200	.24319	.24719	.23805	.23930	-.00423	1.9353	.25026	.24785	.24303	.24324	.24406
Stddev	.00006	.00110	.00195	.00073	.00195	.00150	.00009	.0126	.00086	.00059	.00049	.00007	.00243
%RSD	.02576	.41916	.80010	.29710	.81858	.62686	2.2272	.65175	.34436	.23943	.20052	.02723	.99584
#1	.24687	.26123	.24182	.24667	.23943	.24036	-.00430	1.9442	.24965	.24743	.24268	.24329	.24577
#2	.24696	.26278	.24457	.24771	.23667	.23824	-.00417	1.9264	.25087	.24827	.24337	.24319	.24234

Check ? Value Range	Chk Pass	None	Chk Pass										
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	19.279	.24346	9.9851	.25139	.24548	1.9933	.24936	2.0083	.25213	-.00576	.24967	.49252	1.9782
Stddev	.099	.00044	.0038	.00014	.00068	.0109	.00097	.0023	.00260	.00399	.00134	.00645	.0139
%RSD	.51440	.17880	.03801	.05393	.27659	.54879	.39076	.11504	1.0327	69.358	.53614	1.3106	.70333
#1	19.349	.24315	9.9877	.25129	.24500	2.0010	.24867	2.0067	.25397	-.00858	.24872	.48795	1.9880
#2	19.209	.24376	9.9824	.25149	.24596	1.9856	.25005	2.0099	.25029	-.00293	.25061	.49708	1.9684

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	4.2333	.50921	.23943	-.00366	.24958	.51920	-.00257	.24830	.25091	.23892			
Stddev	.0298	.00202	.00153	.00034	.00136	.00513	.00474	.00063	.00120	.00183			
%RSD	.70333	.39641	.63710	9.3142	.54616	.98893	184.55	.25558	.47709	.76513			
#1	4.2544	.50778	.24051	-.00342	.24862	.51557	-.00592	.24875	.25006	.24022			
#2	4.2123	.51064	.23835	-.00390	.25054	.52283	.00078	.24785	.25175	.23763			

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3255.9	55041.	5608.4								
Stddev	7.3	160.	43.7								
%RSD	.22437	.29144	.77877								
#1	3250.7	55155.	5577.5								
#2	3261.0	54928.	5639.2								

Sample Name: ICVL- Acquired: 5/28/2015 8:42:24 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00983	.10479	.01281	.09758	.00979	.00077	.10341	.20158	.00499	.01048	.01011	.01561
Stddev	.00051	.00041	.00637	.00108	.00021	.00007	.00185	.00036	.00001	.00019	.00035	.00035
%RSD	5.2296	.38652	49.762	1.1106	2.1945	8.4406	1.7850	.17716	.25716	1.8587	3.4131	2.2449
#1	.01020	.10507	.00830	.09835	.00995	.00073	.10211	.20183	.00500	.01034	.00987	.01536
#2	.00947	.10450	.01732	.09681	.00964	.00082	.10472	.20133	.00498	.01062	.01036	.01585
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09845	3.0278	.01224	.20834	.01047	.01933	1.0477	.04218	2.8343	.01020	-.00381	.00888
Stddev	.00100	.0448	.00052	.00036	.00014	.00035	.0066	.00040	.0048	.00006	.00649	.00066
%RSD	1.0193	1.4782	4.2660	.17355	1.3453	1.7879	.63260	.94059	.17025	.58626	170.57	7.4172
#1	.09774	2.9962	.01187	.20808	.01037	.01908	1.0524	.04246	2.8377	.01025	.00078	.00841
#2	.09916	3.0595	.01261	.20859	.01057	.01957	1.0430	.04190	2.8309	.01016	-.00839	.00934
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .01953	.49762	1.0649	.10113	.00999	.01439	.00998	.01620	F .08349	.01009	.02187	.01148
Stddev	.00074	.00683	.0146	.00044	.00011	.00203	.00034	.00018	.03925	.00082	.00000	.00078
%RSD	3.7974	1.3727	1.3727	.43339	1.1011	14.098	3.3574	1.1041	47.009	8.1425	.00829	6.7735
#1	.02006	.50245	1.0752	.10144	.00992	.01582	.01022	.01607	.05574	.01067	.02187	.01203
#2	.01901	.49279	1.0546	.10082	.01007	.01295	.00974	.01633	.11125	.00950	.02187	.01093
Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Pass
	30.000%								30.000%			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3259.0	55604.	5507.2									
Stddev	7.2	156.	5.7									
%RSD	.22148	.28109	.10400									
#1	3253.9	55714.	5511.2									
#2	3264.1	55493.	5503.1									

Sample Name: ICVL- Acquired: 5/28/2015 8:47:05 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00951	.10330	.01352	.09704	.00973	.00089	.10275	.20235	.00506	.00990	.01001	.01506	.09738
Stddev	.00002	.00048	.00407	.00061	.00001	.00005	.00183	.00523	.00015	.00001	.00019	.00016	.00099
%RSD	.18735	.46617	30.099	.62434	.05755	5.7758	1.7792	2.5849	2.9458	.12711	1.8866	1.0531	1.0142
#1	.00952	.10296	.01064	.09747	.00973	.00093	.10404	.19865	.00495	.00989	.00987	.01518	.09668
#2	.00950	.10364	.01640	.09661	.00973	.00086	.10145	.20605	.00516	.00991	.01014	.01495	.09808
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	3.0162	.01182	.19981	.01025	.01885	1.0177	.04090	2.8175	.00959	-.00034	.00954	.01646	.48299
Stddev	.0567	.00095	.00100	.00010	.00005	.0059	.00014	.0152	.00012	.00300	.00197	.00125	.00131
%RSD	1.8791	8.0588	.50152	1.0206	.27370	.57996	.33579	.53923	1.2440	879.65	20.657	7.5771	.27214
#1	3.0563	.01249	.19911	.01033	.01888	1.0135	.04100	2.8067	.00968	.00178	.00814	.01734	.48392
#2	2.9762	.01114	.20052	.01018	.01881	1.0219	.04081	2.8282	.00951	-.00246	.01093	.01558	.48206
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	1.0336	.09910	.00969	.01419	.00978	.01781	.05165	.00947	.02229	.01341			
Stddev	.0028	.00090	.00001	.00048	.00007	.00188	.02291	.00006	.00029	.00107			
%RSD	.27214	.90413	.08236	3.3563	.68042	10.538	44.358	.67720	1.3141	7.9897			
#1	1.0356	.09847	.00968	.01453	.00973	.01649	.06785	.00942	.02250	.01417			
#2	1.0316	.09973	.00969	.01386	.00983	.01914	.03545	.00952	.02208	.01265			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3255.3	55613.	5520.8										
Stddev	1.2	164.	34.9										
%RSD	.03803	.29567	.63224										
#1	3256.2	55497.	5545.5										
#2	3254.4	55729.	5496.1										

Sample Name: ICVL- Acquired: 5/28/2015 8:49:25 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00995	.10455	.01390	.09742	.00971	.00102	.10309	.20864	.00504	.01026	.01030	.01467	.10389	3.0376
Stddev	.00016	.00128	.00235	.00024	.00028	.00009	.00018	.00096	.00013	.00007	.00005	.00006	.00024	.0416
%RSD	1.5830	1.2273	16.900	.24420	2.8437	8.6245	.17531	.45826	2.4929	.71023	.52929	.40800	.23124	1.3707
#1	.00983	.10545	.01556	.09759	.00991	.00096	.10296	.20796	.00495	.01031	.01034	.01463	.10372	3.0081
#2	.01006	.10364	.01223	.09725	.00952	.00109	.10321	.20931	.00513	.01021	.01026	.01471	.10406	3.0670

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.01287	.20632	.01051	.01940	1.0313	.04158	2.8386	.00862	.00537	.00893	.01849	.49290	1.0548	.10190
Stddev	.00058	.00518	.00006	.00030	.0102	.00014	.0015	.00077	.00306	.00059	.00145	.04134	.0885	.00044
%RSD	4.4899	2.5092	.55750	1.5513	.98742	.32688	.05428	8.9148	56.874	6.6534	7.8433	8.3863	8.3863	.42947
#1	.01327	.20998	.01047	.01919	1.0385	.04149	2.8397	.00808	.00321	.00935	.01952	.46367	.99226	.10220
#2	.01246	.20266	.01055	.01961	1.0241	.04168	2.8375	.00917	.00754	.00851	.01747	.52213	1.1174	.10159

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01003	.01591	.01014	.01779	.04961	.00931	.02274	.01360
Stddev	.00009	.00205	.00012	.00019	.02012	.00112	.00119	.00101
%RSD	.93336	12.885	1.1589	1.0641	40.559	12.073	5.2317	7.3980
#1	.00996	.01736	.01022	.01792	.06383	.01011	.02358	.01431
#2	.01010	.01446	.01005	.01766	.03538	.00852	.02190	.01289

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3303.4	56888.	5570.6
Stddev	5.1	55.	106.0
%RSD	.15445	.09619	1.9022
#1	3299.8	56849.	5645.6
#2	3307.0	56927.	5495.7

Sample Name: CCVH-3283796 Acquired: 5/28/2015 8:53:31 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00593	49.413	-.00540	.00042	.00057	.00013	1.0093	.02640	-.00042	-.00059	.00044	.00303	49.892
Stddev	.00002	.138	.00375	.00072	.00010	.00004	.0023	.00144	.00035	.00032	.00029	.00028	.666
%RSD	.31881	.27898	69.435	170.15	17.520	27.153	.22672	5.4670	84.453	53.734	66.916	9.1418	1.3342
#1	-.00595	49.316	-.00275	.00093	.00050	.00011	1.0110	.02742	-.00017	-.00082	.00064	.00284	49.421
#2	-.00592	49.511	-.00806	-.00009	.00064	.00016	1.0077	.02538	-.00067	-.00037	.00023	.00323	50.363

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.02508	.00099	.03784	-.00099	-.00053	245.80	.00241	.00323	.00142	5.0023	-.01182	.01246	-.00941
Stddev	.08633	.00097	.00195	.00003	.00017	1.31	.00021	.00301	.00199	.0010	.00461	.00206	.00946
%RSD	344.18	97.999	5.1517	3.1374	32.885	.53250	8.6268	93.214	139.76	.01951	39.040	16.556	100.54
#1	-.03596	.00168	.03646	-.00097	-.00065	244.87	.00226	.00110	.00002	5.0030	-.00855	.01392	-.01610
#2	.08613	.00031	.03922	-.00101	-.00041	246.72	.00256	.00536	.00283	5.0016	-.01508	.01100	-.00272

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.02014	-.00120	.00022	4.9588	-.01388	.00076	10.354	.00288	-.00025	-.12531
Stddev	.02025	.00060	.00002	.0046	.00071	.00333	.033	.00005	.00001	.00085
%RSD	100.54	50.302	7.6727	.09217	5.1123	440.67	.32233	1.8696	1.9986	.67755
#1	-.03446	-.00077	.00021	4.9620	-.01438	.00311	10.331	.00285	-.00025	-.12591
#2	-.00582	-.00163	.00023	4.9556	-.01338	-.00160	10.378	.00292	-.00026	-.12471

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3217.3	54605.	5683.6
Stddev	1.6	294.	63.2
%RSD	.05006	.53898	1.1113
#1	3218.5	54397.	5728.2
#2	3216.2	54813.	5638.9

Sample Name: CCV-3290307 Acquired: 5/28/2015 8:56:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .48739	Al1670 ppm .50570	As1890 ppm .98844	B_2089 ppm .50000	Ba4554 ppm W .47433	Be3130 ppm .47718	Bi2230 ppm -.00410	Ca3179 ppm 4.8590	Cd2288 ppm .49860	Co2286 ppm .49747	Cr2055 ppm .49600
#1	.48911	.50666	.99069	.49996	.47580	.47818	-.00389	4.8692	.49868	.50043	.49647
#2	.48567	.50474	.98618	.50004	.47286	.47619	-.00431	4.8487	.49852	.49450	.49552
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .50000 -5.0000%	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .48779	Fe2599 ppm 2.4418	K_7664 ppm 47.961	Li6707 ppm .96021	Mg2790 ppm 19.482	Mn2576 ppm .49713	Mo2020 ppm .48935	Na5895 ppm 4.8616	Ni2316 ppm .49738	P_1782 ppm .99582	Pb2203 ppm 1.0021
#1	.48714	2.4441	48.011	.96574	19.520	.49767	.49130	4.8602	.50022	1.0020	1.0072
#2	.48845	2.4396	47.912	.95467	19.444	.49658	.48740	4.8631	.49455	.98969	.99695
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm -.00294	Sb2068 ppm .98911	Se1960 ppm .99352	Si2881 ppm 4.9053	SiO2 ppm 10.497	Sn1899 ppm .99089	Sr4077 ppm .47688	Th2837 ppm -.00317	Ti3349 ppm .48865	Tl1908 ppm 1.0187	U_3701 ppm -.04040
#1	.00308	.99394	.99675	4.8909	10.467	.99485	.47778	-.00431	.48767	1.0263	-.04447
#2	-.00897	.98429	.99029	4.9197	10.528	.98694	.47597	-.00203	.48962	1.0111	-.03633
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .49784	Zn2062 ppm .50760	Zr3391 ppm .47769								
#1	.49426	.50728	.47884								
#2	.50142	.50792	.47655								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3274.5	Y_3600 Cts/S 55445.	Y_3774 Cts/S 5681.0								
#1	3263.0	55429.	5724.0								
#2	3286.0	55461.	5638.1								

Sample Name: ICB Acquired: 5/28/2015 8:58:39 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00035	Al1670 ppm -.00108	As1890 ppm .00019	B_2089 ppm -.00025	Ba4554 ppm -.00009	Be3130 ppm -.00002	Bi2230 ppm -.00643	Ca3179 ppm -.00044	Cd2288 ppm -.00029	Co2286 ppm -.00045	Cr2055 ppm -.00001	Cu3247 ppm -.00055	Fe2599 ppm .00011
#1	.00016	-.00126	.00339	.00014	-.00018	.00006	-.00397	.00113	-.00040	-.00075	.00023	-.00017	-.00086
#2	.00054	-.00091	-.00300	-.00064	.00001	-.00010	-.00890	-.00200	-.00019	-.00015	-.00024	-.00092	.00109
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .08302	Li6707 ppm -.00005	Mg2790 ppm .00896	Mn2576 ppm -.00001	Mo2020 ppm .00023	Na5895 ppm .02798	Ni2316 ppm -.00006	P_1782 ppm -.00328	Pb2203 ppm -.00008	S_1820 ppm -.00328	Sb2068 ppm -.00130	Se1960 ppm .00422	Si2881 ppm .00820
#1	.07713	-.00143	.00517	-.00002	-.00011	.02830	-.00049	-.00500	.00103	-.00525	-.00142	.00568	.01120
#2	.08891	.00133	.01275	-.00001	.00058	.02767	.00037	-.00157	-.00119	-.00130	-.00118	.00276	.00519
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .01754	Sn1899 ppm .00017	Sr4077 ppm .00000	Th2837 ppm .00030	Ti3349 ppm .00022	TI1908 ppm .00164	U_3701 ppm -.04053	V_2924 ppm -.00048	Zn2062 ppm -.00003	Zr3391 ppm .00123			
#1	.02397	.00037	-.00005	-.00033	.00015	.00146	-.04214	-.00139	-.00042	.00092			
#2	.01110	-.00002	.00005	.00093	.00030	.00182	-.03891	.00043	.00035	.00155			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3264.9	Y_3600 Cts/S 55287.	Y_3774 Cts/S 5659.3										
#1	3215.8	55456.	5676.0										
#2	3314.1	55119.	5642.6										

Sample Name: CRI- Acquired: 5/28/2015 9:02:03 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00941	.10256	F .00435	.09843	.00463	.00087	.10253	.20121	.00525	.00499	.01026
Stddev	.00059	.00009	.00222	.00056	.00016	.00001	.00195	.00373	.00026	.00001	.00013
%RSD	6.2355	.09216	51.041	.56564	3.4966	.59374	1.9027	1.8541	4.8786	.21832	1.3015
#1	.00983	.10249	.00591	.09882	.00452	.00087	.10115	.20385	.00507	.00500	.01036
#2	.00900	.10262	.00278	.09804	.00475	.00087	.10391	.19857	.00543	.00498	.01017
Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
			-50.000%								
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	.01004	.02901	1.0263	.00954	.19623	.00301	.00969	.99707	.01038	.96347	F .00074
Stddev	.00051	.00054	.0940	.00205	.00365	.00003	.00002	.01912	.00008	.00320	.00180
%RSD	5.0558	1.8758	9.1605	21.478	1.8587	.95362	.23330	1.9172	.78410	.33211	243.13
#1	.01039	.02862	.95985	.01098	.19881	.00303	.00971	.98355	.01033	.96121	.00201
#2	.00968	.02939	1.0928	.00809	.19365	.00299	.00968	1.0106	.01044	.96573	-.00053
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .00300	
										-50.000%	
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.09671	.00909	W .01407	.49719	1.0640	.01930	.00495	.00886	.01020	W .01342	W .04108
Stddev	.00223	.00163	.00155	.00365	.0078	.00013	.00009	.00037	.00005	.00190	.04710
%RSD	2.3065	17.916	11.046	.73437	.73437	.67896	1.8444	4.1520	.44508	14.192	114.66
#1	.09514	.01024	.01297	.49461	1.0585	.01921	.00488	.00860	.01023	.01207	.07439
#2	.09829	.00794	.01517	.49977	1.0695	.01939	.00501	.00912	.01017	.01477	.00777
Check ? Value Range	Chk Pass	Chk Pass	Chk Warn .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .01000	
			20.490%							20.490%	-20.490%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00935	.00955	.00928								
Stddev	.00028	.00050	.00001								
%RSD	3.0016	5.2662	.10681								
#1	.00915	.00990	.00929								
#2	.00955	.00919	.00928								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3312.5	56554.	5674.5								
Stddev	3.2	306.	4.7								
%RSD	.09805	.54087	.08274								
#1	3310.2	56338.	5671.2								
#2	3314.8	56771.	5677.9								

Sample Name: CRI- Acquired: 5/28/2015 9:12:53 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	-.00029	.00207	-.00083	-.00028	.00002	-.00524	-.00172	.00016
Stddev	.00084	.00024	.00516	.00010	.00023	.00014	.00051	.00218	.00035
%RSD	92.665	83.994	248.78	12.181	82.331	686.03	9.7715	126.48	227.33
#1	.00031	-.00012	-.00157	-.00090	-.00045	.00012	-.00560	-.00326	.00041
#2	.00149	-.00046	.00572	-.00076	-.00012	-.00008	-.00488	-.00018	-.00009
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	-.00020	-.00023	.00020	.00644	-.00070	.00296	.00005	-.00026
Stddev	.00004	.00005	.00077	.00132	.01190	.00136	.00038	.00006	.00023
%RSD	13.785	25.874	330.05	656.82	184.78	192.82	12.964	133.34	87.479
#1	-.00032	-.00024	.00031	.00113	-.00197	.00026	.00324	.00009	-.00043
#2	-.00026	-.00016	-.00078	-.00073	.01486	-.00166	.00269	.00000	-.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	-.00010	-.00269	.00675	.00376	-.00034	.01430	.00332	.00710
Stddev	.01237	.00025	.00047	.00025	.00613	.00031	.00031	.01229	.02630
%RSD	3347.0	258.76	17.602	3.7579	163.03	90.803	2.1712	370.26	370.26
#1	.00912	.00008	-.00302	.00657	-.00057	-.00012	.01408	-.00537	-.01149
#2	-.00838	-.00027	-.00235	.00693	.00809	-.00056	.01451	.01201	.02570
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00001	.00067	-.00004	.01161	-.03811	-.00027	-.00022	-.00017
Stddev	.00043	.00011	.00005	.00032	.00191	.03032	.00055	.00024	.00147
%RSD	5107.1	1609.4	7.9567	768.58	16.427	79.564	202.14	108.58	843.46
#1	-.00030	-.00007	.00070	-.00027	.01026	-.01667	-.00066	-.00005	.00087
#2	.00031	.00009	.00063	.00019	.01296	-.05955	.00012	-.00040	-.00121
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3221.7	54780.	5430.2						
Stddev	4.0	89.	4.0						
%RSD	.12487	.16301	.07365						
#1	3224.6	54843.	5427.4						
#2	3218.9	54717.	5433.0						

Sample Name: CRI- Acquired: 5/28/2015 9:20:07 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	-.00019	.01104	-.00075	-.00007	-.00002	-.00577	.00425	.00002
Stddev	.00051	.00010	.00045	.00037	.00011	.00008	.00302	.00261	.00002
%RSD	318.12	52.160	4.0900	49.911	169.74	346.44	52.397	61.435	90.166
#1	-.00020	-.00026	.01136	-.00048	.00001	-.00008	-.00363	.00240	.00003
#2	.00052	-.00012	.01072	-.00101	-.00015	.00003	-.00791	.00609	.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	-.00005	-.00066	-.00070	.02959	-.00036	-.00736	.00002	-.00003
Stddev	.00028	.00034	.00094	.00332	.01635	.00046	.00019	.00000	.00017
%RSD	81.015	737.21	141.21	472.95	55.258	130.62	2.5698	8.3326	551.68
#1	-.00015	.00020	.00000	-.00305	.04115	-.00068	-.00749	.00002	.00009
#2	-.00054	-.00029	-.00133	.00165	.01803	-.00003	-.00722	.00002	-.00015
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00836	-.00004	-.00234	-.00231	-.00237	.00024	.00138	.02053	.04392
Stddev	.00339	.00008	.00134	.00125	.00564	.00198	.00481	.00800	.01713
%RSD	40.560	198.89	57.273	54.058	237.62	837.66	348.57	38.996	38.996
#1	.01076	.00002	-.00140	-.00143	-.00637	.00164	.00478	.02619	.05604
#2	.00597	-.00009	-.00329	-.00319	.00162	-.00116	-.00202	.01487	.03181
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.00008	.00035	.00006	.00209	-.02735	-.00071	-.00013	-.00165
Stddev	.00113	.00008	.00081	.00034	.00020	.00837	.00015	.00035	.00270
%RSD	4963.5	105.32	228.91	518.89	9.4259	30.588	21.091	274.61	163.80
#1	-.00082	.00014	-.00022	.00030	.00223	-.03327	-.00082	.00012	.00026
#2	.00078	.00002	.00093	-.00017	.00195	-.02144	-.00061	-.00038	-.00356
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3217.7	54347.	5309.9						
Stddev	2.7	880.	19.2						
%RSD	.08259	1.6200	.36251						
#1	3215.8	53725.	5296.2						
#2	3219.6	54970.	5323.5						

Sample Name: ICSA-3279402 Acquired: 5/28/2015 9:24:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00000	510.52	-.00547	W -.00914	.00006	-.00016	-.00682	450.36	.00012	.00036	W .00319
Stddev	.00064	.92	.00353	.00065	.00013	.00004	.00025	5.58	.00026	.00011	.00016
%RSD	19205.	.18006	64.484	7.1146	201.93	26.537	3.7117	1.2392	220.33	29.699	4.9707
#1	.00046	511.17	-.00298	-.00868	-.00003	-.00013	-.00699	446.41	-.00007	.00029	.00308
#2	-.00045	509.87	-.00797	-.00960	.00015	-.00020	-.00664	454.31	.00030	.00044	.00331
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00700 -.00700	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00186 -.00186
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00070	185.03	-.04507	W .00614	520.32	W .00109	-.00604	.03237	W .00946	-.01077	.00373
Stddev	.00036	.54	.00551	.00074	.28	.00002	.00013	.00525	.00040	.00068	.00073
%RSD	51.633	.29418	12.231	12.033	.05372	2.0735	2.2275	16.230	4.2466	6.3447	19.594
#1	-.00045	185.42	-.04897	.00562	520.12	.00108	-.00594	.02865	.00974	-.01125	.00424
#2	-.00096	184.65	-.04117	.00666	520.52	.00111	-.00613	.03608	.00917	-.01028	.00321
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00522 -.00522	Chk Pass	Chk Warn .00050 -.00050	Chk Pass	Chk Pass	Chk Warn .00258 -.00258	Chk Pass	Chk Pass
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	-.13233	-.00287	F .01659	W .02596	.05555	.00085	W .00412	F .02123	.00013	-.00913	-.14893
Stddev	.00837	.00322	.00403	.01586	.03394	.00039	.00004	.00135	.00026	.00132	.01347
%RSD	6.3278	112.31	24.307	61.097	61.097	45.220	1.0216	6.3535	204.83	14.476	9.0428
#1	-.13826	-.00059	.01944	.01474	.03155	.00058	.00415	.02027	.00031	-.00820	-.13941
#2	-.12641	-.00515	.01374	.03717	.07954	.00113	.00409	.02218	-.00006	-.01007	-.15846
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Fail .01300 -.01300	Chk Warn .00694 -.06940	None	Chk Pass	Chk Warn .00050 -.00050	Chk Fail .02000 -.02000	Chk Pass	Chk Pass	Chk Pass
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00155	.00099	-.00410								
Stddev	.00069	.00016	.00098								
%RSD	44.408	16.549	23.944								
#1	.00204	.00087	-.00340								
#2	.00107	.00111	-.00479								
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2947.8	47722.	5513.4								
Stddev	7.6	18.	26.7								
%RSD	.25785	.03770	.48402								
#1	2942.5	47709.	5532.3								
#2	2953.2	47734.	5494.5								

Sample Name: ICSAB-3290308 Acquired: 5/28/2015 9:28:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	1.0516	506.70	1.9556	1.9231	.47579	.46274	.97570	446.04	1.0359	.44543	.42433	.51182	183.70
Stddev	.0037	1.27	.0050	.0010	.00067	.00011	.00491	.28	.0012	.00186	.00178	.00252	.36
%RSD	.35164	.25071	.25749	.05256	.14047	.02435	.50289	.06370	.11626	.41726	.41994	.49250	.19445

#1	1.0489	505.81	1.9592	1.9239	.47532	.46282	.97917	446.24	1.0351	.44675	.42559	.51003	183.45
#2	1.0542	507.60	1.9520	1.9224	.47626	.46266	.97223	445.83	1.0368	.44412	.42307	.51360	183.95

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.968	.96087	508.35	.49224	.90240	48.657	.90291	1.9460	.90041	.89643	.97453	4.8262	10.337
Stddev	.084	.00335	1.33	.00138	.00278	.479	.00201	.0013	.00189	.01240	.00469	.0105	.020
%RSD	.17534	.34875	.26069	.28122	.30843	.98485	.22315	.06575	.20970	1.3834	.48170	.21849	.19397

#1	47.908	.95850	507.41	.49126	.90437	48.318	.90434	1.9469	.90175	.90520	.97785	4.8337	10.322
#2	48.027	.96324	509.28	.49322	.90043	48.996	.90149	1.9451	.89908	.88766	.97121	4.8188	10.351

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	22.120	8.8121	.92166	2.0517	.95761	8.3367	-.11497	.51487	.95425	.86416			
Stddev	.043	.0027	.00023	.0029	.00380	.0532	.02457	.00117	.00018	.00093			
%RSD	.19397	.03007	.02488	.14217	.39665	.63859	21.373	.22795	.01887	.10747			

#1	22.090	8.8102	92182	2.0497	.95492	8.3743	-.13235	.51404	.95438	.86482			
#2	22.151	8.8140	.92149	2.0538	.96030	8.2990	-.09760	.51570	.95412	.86350			

Check ? Value Range	Chk Pass	None	Chk Pass										
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	2957.9	48994.	5731.3										
Stddev	3.6	577.	.3										
%RSD	.12173	1.1786	.00488										

#1	2960.4	49403.	5731.5										
#2	2955.3	48586.	5731.1										

Sample Name: LRA-3255707 Acquired: 5/28/2015 9:31:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00124	-.30916	9.5825	9.4434	11.192	-.00572	-.00500	.02369	2.0147	4.7713	9.4572	10.078	494.73
Stddev	.00022	.01044	.0318	.0072	.389	.00001	.00121	.00309	.0014	.0009	.0180	.010	6.45
%RSD	17.648	3.3768	.33185	.07594	3.4773	.20710	24.296	13.034	.06809	.01958	.19051	.09688	1.3031
#1	.00139	-.30177	9.5600	9.4384	10.917	-.00573	-.00414	.02151	2.0157	4.7719	9.4444	10.071	490.17
#2	.00108	-.31654	9.6050	9.4485	11.467	-.00571	-.00586	.02587	2.0137	4.7706	9.4699	10.085	499.29

Check ? Value Range	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.18896	.00048	-.01396	9.8215	4.7684	.00991	9.6216	.00748	9.6464	-.03495	.03768	4.8351	46.488
Stddev	.02158	.00181	.00879	.0584	.0045	.00608	.0105	.00315	.0086	.00063	.00117	.0447	.890
%RSD	11.418	375.22	63.000	.59447	.09475	61.324	.10870	42.096	.08897	1.7916	3.1101	.92462	1.9141
#1	-.20422	-.00080	-.00774	9.7802	4.7716	.00561	9.6290	.00971	9.6524	-.03539	.03851	4.8667	45.859
#2	-.17370	.00176	-.02017	9.8628	4.7652	.01421	9.6142	.00526	9.6403	-.03450	.03685	4.8035	47.117

Check ? Value Range	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass	Chk Pass
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	99.485	.02197	9.2729	.04942	9.7442	4.8760	-.28449	9.9092	9.5713	-.00765			
Stddev	1.904	.00026	.1380	.00708	.0002	.0596	.00003	.0016	.0121	.00182			
%RSD	1.9141	1.1843	1.4881	14.316	.00224	1.2220	.01053	.01592	.12651	23.745			
#1	98.138	.02179	9.1754	.05442	9.7440	4.9181	-.28451	9.9103	9.5799	-.00636			
#2	100.83	.02215	9.3705	.04442	9.7443	4.8339	-.28447	9.9081	9.5628	-.00893			

Check ? Value Range	None	None	Chk Pass	Chk Pass								
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3223.3	54517.	5759.2										
Stddev	8.5	49.	115.0										
%RSD	.26304	.08921	1.9967										
#1	3217.3	54482.	5840.5										
#2	3229.3	54551.	5677.9										

Sample Name: CCVH-3283796 Acquired: 5/28/2015 9:34:27 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00549	49.905	.00026	.01131	.00051	-.00011	1.0087	.02844	-.00012	-.00056	.00064	.00171	50.336
Stddev	.00023	.288	.00406	.00138	.00003	.00013	.0012	.00211	.00001	.00030	.00020	.00010	.021
%RSD	4.2345	.57664	1559.5	12.210	5.2198	111.93	.11554	7.4099	11.418	54.056	30.714	5.8008	.04221
#1	-.00532	50.109	.00313	.01228	.00050	-.00020	1.0095	.02695	-.00013	-.00035	.00077	.00178	50.351
#2	-.00565	49.702	-.00261	.01033	.00053	-.00002	1.0079	.02993	-.00011	-.00078	.00050	.00164	50.321
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.01257	.00337	.04598	-.00139	.00099	243.17	.00264	.00596	.00067	4.9381	-.00814	.01075	.04037
Stddev	.00886	.00038	.00888	.00004	.00003	.16	.00007	.00154	.00192	.0024	.00296	.00299	.01788
%RSD	70.488	11.246	19.311	2.9753	2.8154	.06731	2.7606	25.748	286.20	.04928	36.352	27.838	44.293
#1	.01883	.00364	.03971	-.00142	.00101	243.05	.00270	.00488	.00203	4.9398	-.00605	.01287	.05302
#2	.00630	.00310	.05226	-.00136	.00097	243.28	.00259	.00705	-.00069	4.9364	-.01023	.00864	.02773
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.08640	-.00368	.00060	5.0350	-.01264	.00106	10.423	.00246	.00044	-.13547			
Stddev	.03827	.00164	.00002	.0165	.00015	.00172	.020	.00045	.00037	.00300			
%RSD	44.293	44.518	3.2366	.32749	1.1952	161.38	.18978	18.303	84.804	2.2143			
#1	.11345	-.00484	.00062	5.0466	-.01274	.00228	10.409	.00214	.00070	-.13759			
#2	.05934	-.00252	.00059	5.0233	-.01253	-.00015	10.437	.00278	.00017	-.13335			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3153.7	52164.	5642.0										
Stddev	7.9	141.	90.7										
%RSD	.25045	.27071	1.6081										
#1	3148.1	52064.	5706.1										
#2	3159.2	52264.	5577.8										

Sample Name: CCV-3290307 Acquired: 5/28/2015 9:37:04 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48744	.51790	.98560	.50883	.47007	.47812	-.00223	4.8726	.50489	.49751	.48217	.48626	2.4898
Stddev	.00135	.00017	.00373	.00299	.00568	.00559	.00121	.0515	.00041	.00330	.00558	.00252	.0348
%RSD	.27796	.03222	.37843	.58811	1.2076	1.1683	54.235	1.0581	.08116	.66238	1.1564	.51915	1.3979
#1	.48840	.51802	.98296	.50671	.46605	.47417	-.00137	4.8361	.50460	.49518	.47822	.48804	2.4652
#2	.48648	.51779	.98823	.51095	.47408	.48207	-.00308	4.9090	.50518	.49984	.48611	.48447	2.5145

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.773	.94606	19.815	.50945	.48845	4.8461	.49738	1.0022	1.0062	.00038	.98994	.99014	5.0031
Stddev	.631	.01197	.019	.00044	.00139	.0648	.00216	.0046	.0024	.00018	.00557	.00644	.0752
%RSD	1.3204	1.2648	.09517	.08554	.28399	1.3370	.43335	.45874	.23984	47.357	.56231	.65065	1.5028
#1	47.327	.93760	19.828	.50975	.48747	4.8002	.49585	.99897	1.0044	.00051	.98600	.98558	4.9499
#2	48.219	.95452	19.802	.50914	.48943	4.8919	.49890	1.0055	1.0079	.00025	.99388	.99469	5.0562

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.707	.99398	.47454	-.00516	.49654	1.0178	-.02333	.51397	.52239	.47603
Stddev	.161	.00441	.00551	.00168	.00006	.0070	.01959	.00214	.00111	.00691
%RSD	1.5028	.44331	1.1608	32.618	.01216	.68852	83.961	.41620	.21313	1.4517
#1	10.593	.99086	.47064	-.00636	.49658	1.0129	-.00948	.51245	.52160	.47114
#2	10.820	.99710	.47843	-.00397	.49649	1.0228	-.03719	.51548	.52318	.48091

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3177.5	52972.	5496.7									
Stddev	17.5	44.	91.1									
%RSD	.55203	.08222	1.6567									
#1	3165.1	53003.	5561.1									
#2	3189.9	52941.	5432.3									

Sample Name: CCB Acquired: 5/28/2015 9:39:34 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

ELEM	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
AVG	.00023	-.00116	W -.00512	.00490	-.00053	-.00003	-.00219	.00150	-.00013	-.00027	-.00003
STDDEV	.00026	.00014	.00139	.00003	.00029	.00002	.00214	.00075	.00021	.00009	.00007
%RSD	115.89	12.065	27.244	.65395	54.949	92.127	98.045	49.689	166.24	32.030	261.27
#1	.00041	-.00106	-.00610	.00488	-.00074	-.00001	-.00067	.00203	.00002	-.00021	-.00008
#2	.00004	-.00126	-.00413	.00493	-.00033	-.00004	-.00370	.00097	-.00028	-.00033	.00002
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
ELEM	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
AVG	-.00017	-.00137	.01278	-.00024	-.00105	-.00004	.00054	.00001	.00018	-.00340	-.00085
STDDEV	.00029	.00268	.01639	.00073	.00009	.00004	.00016	.00071	.00024	.00508	.00062
%RSD	164.72	196.58	128.25	308.17	8.4483	94.515	29.718	4801.8	135.52	149.29	73.397
#1	-.00038	-.00326	.02437	-.00076	-.00098	-.00001	.00043	-.00048	.00001	-.00700	-.00041
#2	.00003	.00053	.00119	.00028	-.00111	-.00006	.00066	.00051	.00034	.00019	-.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
ELEM	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
AVG	-.00416	.00238	.00499	.01024	.02191	.00097	-.00005	.00066	.00024	.00177	-.04576
STDDEV	.00394	.00199	.00275	.00579	.01239	.00038	.00008	.00091	.00019	.00079	.01244
%RSD	94.673	83.605	55.047	56.556	56.556	39.523	160.50	138.18	80.357	44.731	27.190
#1	-.00137	.00097	.00305	.01433	.03068	.00124	.00001	.00130	.00010	.00232	-.05455
#2	-.00694	.00378	.00693	.00614	.01315	.00070	-.00011	.00002	.00038	.00121	-.03696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
ELEM	V_2924	Zn2062	Zr3391								
UNITS	ppm	ppm	ppm								
AVG	-.00038	-.00019	-.00078								
STDDEV	.00023	.00000	.00028								
%RSD	58.965	1.6824	36.614								
#1	-.00054	-.00019	-.00098								
#2	-.00022	-.00019	-.00058								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
INT. STD.	Y_2243	Y_3600	Y_3774								
UNITS	Cts/S	Cts/S	Cts/S								
AVG	3271.8	55962.	5663.7								
STDDEV	5.1	12.	13.4								
%RSD	.15727	.02094	.23740								
#1	3275.5	55954.	5673.2								
#2	3268.2	55971.	5654.2								

Sample Name: CCVL3296658 Acquired: 5/28/2015 9:41:57 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .01028	Al1670 ppm .10680	As1890 ppm F .00948	B_2089 ppm .10445	Ba4554 ppm .00940	Be3130 ppm .00081	Bi2230 ppm .10197	Ca3179 ppm .20368	Cd2288 ppm .00523	Co2286 ppm .01024	Cr2055 ppm .01002	Cu3247 ppm .01469
#1	.00997	.10631	.00963	.10488	.00958	.00090	.10282	.20176	.00534	.01013	.01009	.01479
#2	.01058	.10730	.00932	.10401	.00923	.00072	.10111	.20561	.00512	.01036	.00995	.01459
Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .1500 -30.000%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm .10227	K_7664 ppm 2.9845	Li6707 ppm .01084	Mg2790 ppm .20800	Mn2576 ppm .01070	Mo2020 ppm .01960	Na5895 ppm .10272	Ni2316 ppm .04160	P_1782 ppm .29120	Pb2203 ppm .01085	S_1820 ppm -.00421	Sb2068 ppm .01132
#1	.10009	3.0316	.00971	.20610	.01058	.01957	1.0240	.04159	2.9168	.01080	-.00392	.01188
#2	.10446	2.9375	.01197	.20989	.01081	.01963	1.0304	.04160	2.9071	.01090	-.00450	.01076
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm .01705	Si2881 ppm .51052	SiO2 ppm 1.0925	Sn1899 ppm .10204	Sr4077 ppm .00987	Th2837 ppm .01696	Ti3349 ppm .01042	Tl1908 ppm .01632	U_3701 ppm F .04061	V_2924 ppm .00987	Zn2062 ppm .02281	Zr3391 ppm .01269
#1	.01188	.51728	1.1070	.10349	.00990	.01501	.01051	.01637	.04598	.00941	.02206	.01471
#2	.02222	.50377	1.0781	.10058	.00984	.01891	.01032	.01627	.03524	.01032	.02355	.01067
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3259.8	Y_3600 Cts/S 55861.	Y_3774 Cts/S 5703.9									
#1	3258.7	56393.	5583.7									
#2	3260.8	55328.	5824.1									

Sample Name: LCS 280-278900/2-A Acquired: 5/28/2015 10:10:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278900 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04537	1.9622	.97438	1.0001	1.9181	.04827	1.9694	48.358	.10039
#2	.04525	1.9604	.97607	.99546	1.9135	.04800	1.9804	48.311	.10106
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48937	.18936	.24344	1.0059	48.865	.96328	49.274	.50590	1.0293
#2	.48926	.18947	.24401	1.0063	48.747	.96158	49.227	.50551	1.0312
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	50.433	.49023	10.208	.49777	1.9910	.50292	1.9850	9.9204	21.230
#2	51.043	.48959	10.235	.49720	2.0105	.51102	1.9868	10.007	21.414
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9950	.96264	1.0072	.99710	1.9722	2.0670	.51197	.51143	.45359
#2	2.0014	.96024	1.0096	.99893	1.9887	2.0482	.51231	.51002	.45204
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3114.8	51980.	5337.7						
#2	3125.9	52435.	5354.7						

Sample Name: LCSD 280-278900/3-A Acquired: 5/28/2015 10:12:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278900 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04658	1.9577	.98907	1.0083	1.9391	.04823	1.9869	48.694	.10078
#2	.04546	1.9606	.98024	1.0019	1.9335	.04896	1.9710	48.491	.10019
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49129	.19230	.24581	1.0480	49.127	.97449	49.127	.50304	1.0348
#2	.48893	.18774	.24706	1.0565	48.910	.97079	49.152	.50315	1.0299
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	51.013	.49162	10.280	.49678	2.0392	.50278	1.9934	10.001	21.401
#2	51.219	.48829	10.181	.49511	1.9928	.50587	1.9861	10.022	21.448
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0010	.97056	1.0054	1.0008	1.9755	2.0773	.50853	.50609	.45800
#2	1.9990	.96703	1.0099	1.0004	1.9678	2.0880	.50987	.49863	.46564
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3146.0	53257.	5365.2						
#2	3099.4	53146.	5480.2						

Sample Name: LCS 280-278890/2-A Acquired: 5/28/2015 10:15:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278890 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04542	1.9617	.97204	.99871	1.8994	.04775	1.9474	47.673	.09969
#2	.04477	1.9459	.97126	1.0078	1.9189	.04828	1.9764	48.111	.10092
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48167	.18245	.24341	1.0145	48.262	.95558	48.533	.49911	1.0157
#2	.48427	.18735	.24370	1.0134	48.663	.96306	48.908	.50336	1.0242
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	49.923	.48138	10.107	.49180	1.9729	.49636	1.9608	9.9039	21.194
#2	50.711	.48553	10.220	.48542	1.9959	.50754	1.9805	9.9756	21.348
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9738	.95317	.99727	.99095	1.9556	2.0713	.50575	.49484	.45416
#2	1.9777	.96159	1.0022	.99543	1.9465	2.0672	.51087	.50370	.46008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3043.6	52203.	5491.9						
#2	3115.2	51325.	5460.8						

Sample Name: LCS 280-278895/2-A Acquired: 5/28/2015 10:17:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278895 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04721	1.9729	.99794	1.0361	1.9095	.04807	2.0082	47.860	.10280
#2	.04528	1.9730	.99706	1.0347	1.8995	.04775	2.0161	47.554	.10190
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49052	.19166	.24838	.99823	48.503	.96019	49.065	.50787	1.0372
#2	.48832	.19043	.24857	.99653	48.150	.96095	49.239	.51006	1.0327
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	50.732	.49059	10.427	.49913	2.0514	.51608	2.0274	9.9853	21.368
#2	49.891	.48767	10.463	.49534	2.0475	.51587	2.0325	10.015	21.432
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0129	.96078	1.0131	1.0076	1.9911	2.0600	.51498	.50595	.45480
#2	1.9973	.95555	1.0143	1.0106	1.9753	2.1162	.51889	.50128	.45840
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3143.9	53032.	5616.3						
#2	3154.5	52977.	5634.7						

Sample Name: LCS 280-278892/2-A Acquired: 5/28/2015 10:20:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278892 6010b

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04646	1.9829	1.0018	1.0634	1.9177	.04824	2.0313	47.810	.10336
Stddev	.00020	.0008	.0033	.0003	.0047	.00030	.0033	.086	.00050
%RSD	.43221	.03902	.33034	.02814	.24754	.62169	.16462	.18080	.48786
#1	.04660	1.9834	1.0042	1.0636	1.9210	.04845	2.0337	47.872	.10372
#2	.04632	1.9823	.99949	1.0632	1.9143	.04803	2.0290	47.749	.10301
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49234	F .19354	.25334	.99135	48.576	.96673	49.364	.51020	1.0588
Stddev	.00092	.00099	.00100	.00249	.018	.00021	.095	.00026	.0002
%RSD	.18676	.51162	.39640	.25088	.03745	.02195	.19344	.05085	.02139
#1	.49299	.19424	.25405	.99310	48.563	.96658	49.432	.51038	1.0589
#2	.49169	.19284	.25263	.98959	48.589	.96688	49.297	.51001	1.0586
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.949	.49177	10.529	.50149	2.1175	.53229	2.0511	10.152	21.724
Stddev	.098	.00070	.015	.00174	.0282	.00289	.0053	.023	.049
%RSD	.19227	.14259	.14205	.34639	1.3316	.54321	.25665	.22592	.22592
#1	51.018	.49226	10.540	.50271	2.1375	.53434	2.0548	10.168	21.759
#2	50.880	.49127	10.519	.50026	2.0976	.53025	2.0474	10.135	21.690
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0467	.96510	1.0197	1.0327	1.9981	2.1142	.51906	.50117	.46425
Stddev	.0104	.00151	.0001	.0013	.0055	.0181	.00167	.00142	.00636
%RSD	.50931	.15598	.01137	.12251	.27452	.85857	.32227	.28263	1.3706
#1	2.0541	.96616	1.0198	1.0336	2.0020	2.1270	.52024	.50217	.45975
#2	2.0394	.96403	1.0196	1.0318	1.9942	2.1013	.51788	.50017	.46875
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	3166.5	53855.	5782.8						
Stddev	3.5	296.	14.4						
%RSD	.11132	.54923	.24963						
#1	3169.0	53645.	5772.6						
#2	3164.0	54064.	5793.0						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 10:22:27 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00607	50.338	-.00245	.00304	.00056	-.00004	1.0390	.03079	-.00001	-.00056	.00083	.00152	50.748
Stddev	.00064	.410	.00396	.00036	.00005	.00008	.0042	.00342	.00002	.00015	.00001	.00073	.110
%RSD	10.570	.81548	161.34	11.949	8.1680	199.47	.40603	11.094	263.37	26.024	.96955	48.152	.21718
#1	-.00652	50.047	-.00526	.00330	.00059	.00002	1.0420	.03321	.00001	-.00066	.00082	.00203	50.670
#2	-.00561	50.628	.00035	.00279	.00052	-.00009	1.0360	.02838	-.00003	-.00046	.00083	.00100	50.826

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.10719	.00025	.05224	-.00129	-.00005	245.30	.00288	.00542	.00307	5.0842	-.01496	.00708	-.00908
Stddev	.00391	.00165	.00519	.00008	.00011	2.57	.00009	.00087	.00024	.0180	.00439	.00076	.00930
%RSD	3.6447	654.10	9.9260	6.1666	223.21	1.0463	2.9556	16.028	7.7862	.35378	29.379	10.729	102.48
#1	.10995	-.00091	.04857	-.00134	-.00012	243.48	.00282	.00480	.00324	5.0969	-.01807	.00654	-.00250
#2	.10442	.00142	.05591	-.00123	.00003	247.11	.00294	.00603	.00290	5.0714	-.01185	.00762	-.01565

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.01943	-.00010	.00035	5.0370	-.01324	.00258	10.421	.00303	.00000	-.13082
Stddev	.01991	.00021	.00001	.0055	.00030	.00028	.037	.00038	.0009	.00241
%RSD	102.48	213.69	1.9544	.10929	2.2911	10.656	.35387	12.519	52314.	1.8459
#1	-.00535	.00005	.00035	5.0332	-.01345	.00239	10.447	.00330	-.00062	-.13253
#2	-.03350	-.00024	.00034	5.0409	-.01303	.00278	10.395	.00276	.00062	-.12912

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3257.2	54118.	5644.2
Stddev	16.4	564.	45.0
%RSD	.50456	1.0420	.79686
#1	3245.6	53719.	5676.0
#2	3268.8	54517.	5612.4

Sample Name: CCV-3290307 Acquired: 5/28/2015 10:25:03 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .48983	Al1670 ppm .51164	As1890 ppm 1.0031	B_2089 ppm .51690	Ba4554 ppm .47594	Be3130 ppm .48155	Bi2230 ppm -.00304	Ca3179 ppm 4.8511	Cd2288 ppm .51140	Co2286 ppm .49784	Cr2055 ppm .50454	Cu3247 ppm .49563	Fe2599 ppm 2.4842
#1	.49047	.51105	1.0076	.51932	.47489	.48027	-.00155	4.8519	.51212	.49940	.51152	.49465	2.4870
#2	.48920	.51224	.99859	.51449	.47699	.48283	-.00452	4.8502	.51068	.49627	.49756	.49660	2.4814
Check ? Value Range	Chk Pass	None	Chk Pass										

Elem Units Avg Stddev %RSD	K_7664 ppm 47.795	Li6707 ppm .95648	Mg2790 ppm 19.389	Mn2576 ppm .50252	Mo2020 ppm .49010	Na5895 ppm 4.8855	Ni2316 ppm .49772	P_1782 ppm 1.0191	Pb2203 ppm .99971	S_1820 ppm .00838	Sb2068 ppm 1.0130	Se1960 ppm 1.0135	Si2881 ppm 4.9055
#1	47.680	.95639	19.392	.50222	.49176	4.8624	.49922	1.0241	1.0050	.01159	1.0176	1.0206	4.8944
#2	47.911	.95657	19.385	.50283	.48844	4.9087	.49621	1.0141	.99441	.00517	1.0084	1.0064	4.9166
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem Units Avg Stddev %RSD	SiO2 ppm 10.498	Sn1899 ppm .99070	Sr4077 ppm .47989	Th2837 ppm -.00260	Ti3349 ppm .49273	TI1908 ppm 1.0244	U_3701 ppm -.03329	V_2924 ppm .51003	Zn2062 ppm .49891	Zr3391 ppm .47821			
#1	10.474	.99550	.47834	-.00078	.49332	1.0270	-.02573	.51042	.49816	.47635			
#2	10.521	.98591	.48144	-.00442	.49213	1.0218	-.04084	.50964	.49966	.48007			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass			

Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3321.0	Y_3600 Cts/S 57174.	Y_3774 Cts/S 5979.8										
#1	3353.0	57190.	5985.0										
#2	3289.0	57158.	5974.6										

Sample Name: CCB Acquired: 5/28/2015 10:27:32 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00059	-.00134	.00069	.00251	-.00039	-.00003	-.00158	-.00088	.00014	-.00018	-.00013	.00015	.00095
Stddev	.00006	.00023	.00512	.00068	.00008	.00010	.00211	.00142	.00015	.00009	.00002	.00029	.00249
%RSD	10.637	16.880	741.38	27.219	19.658	374.95	133.45	162.36	110.84	48.298	11.454	188.10	260.84
#1	.00064	-.00150	-.00293	.00203	-.00034	-.00010	-.00308	-.00188	.00024	-.00025	-.00014	-.00005	.00272
#2	.00055	-.00118	.00431	.00299	-.00045	.00005	-.00009	.00013	.00003	-.00012	-.00012	.00036	-.00081

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.02518	.00237	.00406	-.00003	.00038	.01832	-.00002	-.00323	.00041	.00061	.00301	.00294	.01389
Stddev	.00765	.00102	.00045	.00003	.00014	.00825	.00022	.00188	.00078	.00501	.00065	.00055	.01790
%RSD	30.388	43.064	11.200	79.640	38.123	45.048	892.05	58.074	188.83	815.87	21.609	18.694	128.91
#1	.01977	.00309	.00374	-.00005	.00028	.01249	-.00018	-.00191	.00097	.00415	.00255	.00333	.00123
#2	.03059	.00165	.00438	-.00001	.00048	.02416	.00013	-.00456	-.00014	-.00293	.00347	.00256	.02654

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.02972	-.00090	.00004	.00145	.00011	.00193	-.01108	-.00092	-.00029	.00020
Stddev	.03831	.00023	.00005	.00045	.00022	.00055	.00506	.00019	.00009	.00165
%RSD	128.91	25.638	141.27	31.208	192.82	28.609	45.701	20.996	29.763	843.61
#1	.00263	-.00074	.00007	.00177	.00027	.00154	-.00750	-.00078	-.00035	-.00097
#2	.05681	-.00107	.00000	.00113	-.00004	.00232	-.01466	-.00106	-.00023	.00137

Check ? High Limit Low Limit	Chk Pass										
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3277.7	56756.	5952.1
Stddev	8.9	114.	1.3
%RSD	.27165	.20113	.02229
#1	3284.0	56676.	5951.1
#2	3271.4	56837.	5953.0

Sample Name: CCVL3296658 Acquired: 5/28/2015 10:29:55 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01018	.10664	.01203	.10375	.00977	.00088	.10291	.20233	.00535	.01026	.01026	.01494
Stddev	.00003	.00025	.00449	.00051	.00035	.00002	.00352	.00206	.00002	.00029	.00023	.00003
%RSD	.25551	.23724	37.338	.49397	3.5967	1.8920	3.4239	1.0179	.35400	2.8251	2.2407	.21318

#1	.01016	.10682	.01520	.10339	.00952	.00089	.10042	.20087	.00534	.01006	.01010	.01496
#2	.01020	.10646	.00885	.10411	.01001	.00086	.10540	.20378	.00536	.01047	.01042	.01491

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10119	3.0350	.01146	.21244	.01063	.01981	1.0302	.04193	2.9485	.00955	-.00087	.01289
Stddev	.00335	.0408	.00043	.00583	.00005	.00032	.0145	.00004	.0181	.00097	.00192	.00148
%RSD	3.3098	1.3425	3.7520	2.7424	.47038	1.6368	1.4073	.08586	.61361	10.123	221.16	11.499
#1	.10356	3.0062	.01115	.20832	.01059	.02004	1.0200	.04195	2.9357	.00886	.00049	.01184
#2	.09882	3.0638	.01176	.21656	.01067	.01958	1.0405	.04190	2.9613	.01023	-.00222	.01394

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01586	.51745	1.1073	.10214	.00993	.01524	.01000	.01921	.03622	.01005	.02192	.01382
Stddev	.00488	.00919	.0197	.00222	.00011	.00179	.00032	.00029	.00651	.00006	.00048	.00001
%RSD	30.790	1.7769	1.7769	2.1702	1.1436	11.732	3.2326	1.4869	17.973	.55336	2.2096	.09743
#1	.01931	.51094	1.0934	.10058	.00985	.01398	.00977	.01941	.04082	.01009	.02226	.01381
#2	.01241	.52395	1.1212	.10371	.01001	.01651	.01023	.01900	.03162	.01001	.02158	.01383

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3270.6	56441.	5801.7									
Stddev	8.0	88.	14.7									
%RSD	.24521	.15633	.25257									
#1	3276.2	56379.	5812.1									
#2	3264.9	56504.	5791.4									

Sample Name: MB 280-278900/1-A Acquired: 5/28/2015 10:54:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 ppm .00024	B_2089 ppm .00406	Ba4554 ppm .00043	Be3130 ppm .00012	Bi2230 ppm .00012	Ca3179 ppm .01177	Cd2288 ppm .00009
#1	.00082	.00167	-.00528	.00061	.00026	-.00008	-.00591	.01285	.00012
#2	-.00034	.00204	-.00283	.00026	-.00049	-.00016	-.00311	.01070	.00006
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 ppm .00041	Fe2599 ppm .00008	K_7664 ppm .01464	Li6707 ppm .03605	Mg2790 ppm .00235	Mn2576 ppm .00368	Mo2020 ppm .00014
#1	-.00035	.00001	.00018	.01533	.02805	.00289	.00278	.00012	-.00036
#2	-.00047	-.00015	-.00002	.01395	.04405	.00180	.00459	.00015	-.00019
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 ppm .00624	Pb2203 ppm .00027	S_1820 ppm .00289	Sb2068 ppm .00036	Se1960 ppm .00808	Si2881 ppm .00052	SiO2 ppm .00226
#1	.01508	.00006	-.00176	-.00001	.01053	.00102	.00427	.02666	.05706
#2	-.00261	.00047	-.00401	-.00070	.00563	.00003	.00024	.01148	.02457
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 ppm .00079	Ti3349 ppm .00000	Tl1908 ppm .00007	U_3701 ppm .00321	V_2924 ppm .01853	Zn2062 ppm .00011	Zr3391 ppm .00129
#1	.00126	-.00001	.00109	-.00009	.00158	.01235	.00039	.00129	.00159
#2	.00032	.00001	-.00122	.00054	.00483	.02471	-.00018	.00130	-.00016
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 Cts/S 3276.9	377.433 {89} Cts/S 56814.					
#1	3286.7	56808.	5738.7						
#2	3267.1	56819.	5691.1						

Sample Name: 280-69637-A-22-A Acquired: 5/28/2015 10:56:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	.00368	-.00778	.24969	.08352	-.00011	-.00079	138.58	.00040
Stddev	.00040	.00028	.00447	.00030	.00103	.00027	.00201	.53	.00013
%RSD	53.930	7.5686	57.450	.11949	1.2386	247.63	254.70	.38352	33.448
#1	.00046	.00388	-.00462	.24990	.08279	-.00030	.00063	138.20	.00031
#2	.00102	.00348	-.01094	.24948	.08425	.00008	-.00221	138.95	.00050
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.00044	.00128	.00388	4.0523	.01758	43.195	.11778	-.00199
Stddev	.00033	.00010	.00009	.00072	.0052	.00086	.049	.00022	.00034
%RSD	156.07	22.130	6.8294	18.649	.12725	4.8667	.11304	.18260	17.013
#1	.00002	.00037	.00122	.00337	4.0560	.01697	43.160	.11763	-.00175
#2	-.00044	.00051	.00134	.00439	4.0487	.01818	43.229	.11793	-.00223
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.781	.00698	.02628	.00263	34.807	.00427	.00533	8.2005	17.549
Stddev	.398	.00087	.00102	.00064	.049	.00300	.00667	.0630	.135
%RSD	1.4339	12.400	3.8980	24.316	.13937	70.127	125.02	.76847	.76847
#1	27.499	.00760	.02700	.00309	34.772	.00215	.01005	8.1559	17.454
#2	28.062	.00637	.02555	.00218	34.841	.00639	.00062	8.2450	17.644
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.47556	-.00193	.00041	-.00837	.52618	-.00150	.00198	.00014
Stddev	.00114	.00278	.00170	.00008	.00313	.01812	.00025	.00107	.00241
%RSD	235.74	.58371	88.493	20.435	37.440	3.4432	16.535	54.280	1712.7
#1	.00129	.47359	-.00313	.00047	-.01059	.53900	-.00133	.00274	.00184
#2	-.00032	.47752	-.00072	.00035	-.00615	.51337	-.00168	.00122	-.00156
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3089.3	52792.	5532.3						
Stddev	5.6	40.	20.6						
%RSD	.18127	.07501	.37205						
#1	3085.4	52764.	5546.8						
#2	3093.3	52820.	5517.7						

Sample Name: 280-69637-A-24-A Acquired: 5/28/2015 10:59:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	.00251	-.00045	.04095	.17344	-.00022	-.00611	119.77	.00001
Stddev	.00021	.00055	.00042	.00042	.00222	.00007	.00342	1.27	.00014
%RSD	18.246	21.897	93.255	1.0364	1.2785	32.603	55.899	1.0610	1060.3
#1	.00099	.00289	-.00015	.04125	.17501	-.00017	-.00369	120.67	.00012
#2	.00128	.00212	-.00075	.04065	.17187	-.00026	-.00853	118.87	-.00009
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00048	.00068	.01641	1.7095	.01336	19.969	.78964	-.00070
Stddev	.00001	.00045	.00014	.00164	.0620	.00040	.055	.00204	.00026
%RSD	11.334	93.173	20.360	10.020	3.6272	2.9604	.27686	.25813	36.953
#1	.00008	.00080	.00059	.01758	1.7534	.01364	20.008	.79108	-.00088
#2	.00010	.00016	.00078	.01525	1.6657	.01308	19.929	.78820	-.00052
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.0981	.00752	.08144	.00346	8.2180	.00210	.00089	9.0544	19.376
Stddev	.0141	.00003	.00144	.00028	.0204	.00443	.00017	.0074	.016
%RSD	.23033	.43657	1.7636	8.1891	.24762	211.27	19.264	.08195	.08195
#1	6.1081	.00750	.08043	.00326	8.2324	-.00104	.00077	9.0492	19.365
#2	6.0882	.00754	.08246	.00366	8.2036	.00523	.00102	9.0596	19.388
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.40624	.00041	-.00050	-.00765	-.03006	-.00023	.00159	-.00058
Stddev	.00128	.00444	.00129	.00032	.00187	.01387	.00034	.00004	.00347
%RSD	780.32	1.0939	316.85	64.277	24.376	46.123	143.35	2.7116	599.13
#1	.00107	.40938	-.00050	-.00073	-.00633	-.02026	.00000	.00156	.00187
#2	-.00074	.40310	.00132	-.00027	-.00897	-.03987	-.00047	.00162	-.00303
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3107.1	52272.	5505.0						
Stddev	9.3	420.	4.6						
%RSD	.29826	.80437	.08266						
#1	3100.5	51974.	5508.3						
#2	3113.6	52569.	5501.8						

Sample Name: 280-69637-B-27-A Acquired: 5/28/2015 11:01:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00025	-.02391	.01171	.13911	.76875	-.00013	-.00532	183.45	-.00008
#2	.00078	-.02373	.00609	.13760	.78564	-.00033	-.00069	187.35	.00045
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00034	.00063	.00016	49.624	4.1645	.01000	51.056	1.3937	-.00271
#2	-.00056	.00044	-.00015	50.254	4.2123	.01036	51.159	1.3994	-.00205
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	20.703	.00455	2.2186	-.00277	.08387	-.00193	.01131	27.216	58.242
#2	20.970	.00499	2.2093	.00075	.09308	.00376	.00116	27.441	58.723
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00091	.62059	.00351	-.00059	-.00899	-.05095	-.00052	.00158	-.00037
#2	.00077	.63422	.00175	-.00016	-.00964	-.07617	-.00099	.00208	.00200
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {943}	Y_3774 377.433 {89}						
#1	3024.1	51508.	5513.2						
#2	3066.3	51313.	5460.0						

Sample Name: 280-69637-B-27-ASD@5 Acquired: 5/28/2015 11:04:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00018	As1890 ppm -.00478	B_2089 ppm .00056	Ba4554 ppm .02830	Be3130 ppm .15095	Bi2230 ppm -.00015	Ca3179 ppm -.00350	Cd2288 ppm 36.018
#1	.00000	-.00497	-.00096	.02801	.15030	-.00025	-.00518	35.831	.00037
#2	.00036	-.00460	.00208	.02859	.15161	-.00005	-.00183	36.205	.00028
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00027	Cu3247 ppm 0.0006	Fe2599 ppm -.00049	K_7664 ppm 9.5601	Li6707 ppm .83480	Mg2790 ppm 0.00495	Mn2576 ppm 10.304	Mo2020 ppm .28327
#1	-.00018	-.00010	-.00080	9.5533	.83097	.00545	10.251	.28196	-.00165
#2	-.00035	.00021	-.00017	9.5670	.83863	.00446	10.357	.28459	-.00147
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 3.8997	P_1782 ppm .00304	Pb2203 ppm .45057	S_1820 ppm .00160	Sb2068 ppm .01295	Se1960 ppm -.00117	Si2881 ppm .00774	SiO2 ppm 5.2624
#1	3.8937	.00295	.44666	.00090	.01268	-.00151	.00694	5.2398	11.213
#2	3.9058	.00312	.45447	.00230	.01323	-.00082	.00855	5.2851	11.310
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00030	Th2837 ppm .12240	Ti3349 ppm 0.0116	Tl1908 ppm -.00017	U_3701 ppm -.00385	V_2924 ppm -.04936	Zn2062 ppm -.00070	Zr3391 ppm -.00029
#1	.00053	.12172	.00151	-.00010	-.00385	-.04727	-.00083	-.00031	.00022
#2	.00006	.12307	.00080	-.00023	-.00386	-.05145	-.00056	-.00026	.00063
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3158.6	Y_3774 Cts/S 54049.	377.433 {89}					
#1	3172.5	54082.	5544.8						
#2	3144.7	54016.	5572.6						

Sample Name: 280-69637-B-27-B MS Acquired: 5/28/2015 11:06:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04601	1.9036	W 2.3780	1.0160	1.1598	2.6140	.04739	F 2.0124	218.75
Stddev	.00087	.0013	.0171	.0051	.0005	.0012	.00008	.0128	.44
%RSD	1.8842	.06606	.71813	.50544	.04409	.04611	.16519	.63537	.20045
#1	.04663	1.9027	2.3659	1.0196	1.1594	2.6149	.04733	2.0215	219.06
#2	.04540	1.9045	2.3901	1.0123	1.1601	2.6131	.04744	2.0034	218.44
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10320	.47288	W .18030	.25115	47.652	52.547	.97582	96.170	1.8102
Stddev	.00014	.00102	.00015	.00153	.092	.025	.00283	.017	.0037
%RSD	.13989	.21535	.08469	.60831	.19322	.04824	.28953	.01772	.20318
#1	.10310	.47360	.18020	.25007	47.717	52.565	.97782	96.182	1.8076
#2	.10331	.47216	.18041	.25223	47.587	52.529	.97383	96.158	1.8128
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0177	70.457	.47236	W 12.766	.47319	2.1627	.51974	2.0255	34.968
Stddev	.0005	.808	.00191	.054	.00408	.0069	.00087	.0159	.237
%RSD	.05053	1.1466	.40522	.41953	.86187	.31882	.16657	.78242	.67917
#1	1.0181	69.886	.47371	12.804	.47607	2.1676	.51912	2.0368	35.136
#2	1.0173	71.028	.47101	12.728	.47030	2.1578	.52035	2.0143	34.800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.831	1.9540	1.5474	1.0306	1.0158	1.8657	2.0856	.52367	.49221
Stddev	.508	.0086	.0014	.0019	.0017	.0133	.0144	.00216	.00026
%RSD	.67917	.43756	.08699	.18568	.16234	.71211	.68904	.41152	.05296
#1	75.190	1.9600	1.5484	1.0292	1.0147	1.8751	2.0958	.52214	.49240
#2	74.472	1.9479	1.5465	1.0319	1.0170	1.8563	2.0755	.52519	.49203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.44705								
Stddev	.00153								
%RSD	.34168								
#1	.44597								
#2	.44813								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69637-B-27-B MS Acquired: 5/28/2015 11:06:58 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 278900 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3014.2	51163.	5595.9
Stddev	2.7	9.	25.4
%RSD	.08950	.01675	.45311
#1	3012.3	51169.	5577.9
#2	3016.1	51157.	5613.8

Sample Name: 280-69637-B-27-C MSD Acquired: 5/28/2015 11:09:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04585	1.8686	W 2.3924	1.0082	1.1704	2.6341	.04725	F 2.0257	224.77
Stddev	.00003	.0014	.0156	.0015	.0005	.0071	.00006	.0088	.13
%RSD	.05943	.07732	.65343	.14896	.04329	.27117	.12564	.43439	.05565
#1	.04583	1.8697	2.3814	1.0092	1.1700	2.6290	.04721	2.0319	224.68
#2	.04587	1.8676	2.4035	1.0071	1.1707	2.6391	.04729	2.0195	224.86
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10295	.46891	W 18296	.24814	49.417	52.211	.97121	97.364	1.8452
Stddev	.00012	.00328	.00120	.00097	.048	.087	.00183	.093	.0037
%RSD	.11911	.70047	.65570	.39196	.09620	.16620	.18865	.09575	.20045
#1	.10286	.47123	.18380	.24883	49.450	52.149	.96991	97.298	1.8426
#2	.10303	.46659	.18211	.24745	49.383	52.272	.97250	97.429	1.8478
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0158	71.015	.47032	W 12.860	.47131	2.1933	.51998	2.0380	35.869
Stddev	.0051	.135	.00397	.049	.00379	.0102	.00269	.0040	.000
%RSD	.49907	.18996	.84508	.37849	.80509	.46326	.51803	.19605	.00093
#1	1.0194	71.110	.47313	12.894	.47399	2.2005	.52188	2.0408	35.869
#2	1.0123	70.919	.46751	12.826	.46862	2.1861	.51807	2.0352	35.869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	76.760	1.9349	1.5660	1.0152	1.0069	1.8606	2.0518	.51631	.47910
Stddev	.001	.0166	.0048	.0011	.0023	.0131	.0160	.00267	.00368
%RSD	.00093	.85868	.30691	.11024	.23276	.70212	.78205	.51784	.76795
#1	76.759	1.9467	1.5626	1.0160	1.0052	1.8699	2.0632	.51442	.47650
#2	76.760	1.9232	1.5694	1.0144	1.0085	1.8514	2.0405	.51821	.48170
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.43942								
Stddev	.00089								
%RSD	.20332								
#1	.44006								
#2	.43879								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69637-B-27-C MSD Acquired: 5/28/2015 11:09:23 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 278900 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3084.1	52208.	5703.8
Stddev	11.8	37.	64.2
%RSD	.38360	.07090	1.1251
#1	3075.7	52234.	5658.4
#2	3092.5	52181.	5749.2

Sample Name: 280-69637-A-28-A Acquired: 5/28/2015 11:11:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	-.01819	.01056	.14408	.77448	-.00014	-.00498	184.63	.00017
Stddev	.00033	.00005	.00114	.00219	.00335	.00009	.00209	.78	.00008
%RSD	36.674	.26108	10.768	1.5168	.43217	66.719	42.083	.42033	45.307
#1	.00114	-.01822	.00976	.14253	.77685	-.00007	-.00350	185.18	.00023
#2	.00067	-.01815	.01137	.14562	.77212	-.00020	-.00646	184.08	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	.00041	-.00025	49.638	4.1757	.01172	50.848	1.3999	-.00241
Stddev	.00019	.00006	.00058	.201	.0036	.00208	.172	.0041	.00005
%RSD	28.585	13.712	231.50	.40517	.08548	17.787	.33789	.29557	2.2521
#1	-.00078	.00045	.00016	49.780	4.1732	.01024	50.970	1.4029	-.00245
#2	-.00052	.00037	-.00066	49.495	4.1782	.01319	50.727	1.3970	-.00237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.881	.00538	W 2.2516	-.00055	.08042	.00146	.00850	27.123	58.044
Stddev	.072	.00029	.0300	.00056	.00331	.00113	.00113	.096	.206
%RSD	.34390	5.3615	1.3341	100.65	4.1161	77.525	13.298	.35449	.35449
#1	20.932	.00517	2.2304	-.00094	.08276	.00066	.00930	27.191	58.189
#2	20.830	.00558	2.2729	-.00016	.07808	.00226	.00770	27.055	57.898
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00214	.62938	.00422	.00013	-.00981	W -.09442	-.00137	.00097	-.00118
Stddev	.00078	.00215	.00133	.00002	.00039	.00709	.00013	.00024	.00005
%RSD	36.150	.34091	31.477	18.335	3.9404	7.5039	9.3086	25.014	3.8413
#1	.00160	.63090	.00328	.00011	-.01009	-.09943	-.00128	.00114	-.00121
#2	.00269	.62787	.00516	.00015	-.00954	-.08941	-.00146	.00080	-.00115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3073.4	52128.	5623.4						
Stddev	9.3	200.	44.7						
%RSD	.30268	.38377	.79496						
#1	3080.0	51987.	5591.8						
#2	3066.8	52270.	5655.0						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 11:14:22 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	-.00574	49.848	-.00408	.00146	.00026	.00005	1.0297	.03771	-.00014	-.00056	.00026
Stddev	.00041	1.442	.00028	.00007	.00026	.00007	.0110	.00276	.00035	.00024	.00008
%RSD	7.0865	2.8930	6.8626	4.6466	98.679	158.63	1.0644	7.3082	255.22	43.313	33.105
#1	-.00545	48.828	-.00388	.00141	.00008	-.00001	1.0375	.03576	-.00039	-.00073	.00020
#2	-.00603	50.867	-.00428	.00151	.00044	.00010	1.0220	.03966	.00011	-.00039	.00032
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	.00114	50.828	.06775	.00273	.05241	-.00158	-.00056	242.03	.00236	.00251	.00025
Stddev	.00088	1.316	.04989	.00036	.01353	.00009	.00019	6.44	.00032	.00060	.00120
%RSD	77.374	2.5894	73.628	13.025	25.811	5.6311	33.244	2.6603	13.754	23.715	479.49
#1	.00052	49.898	.03248	.00248	.06197	-.00152	-.00069	237.47	.00213	.00209	-.00060
#2	.00177	51.759	.10303	.00298	.04284	-.00164	-.00043	246.58	.00259	.00293	.00110
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	4.9939	-.01234	.01397	.00473	.01012	-.00142	.00031	5.0463	-.01279	.00410	W 10.504
Stddev	.0565	.00202	.00302	.00068	.00146	.00048	.00013	.0064	.00003	.00162	.130
%RSD	1.1306	16.373	21.610	14.406	14.406	33.617	42.963	.12704	.23307	39.416	1.2355
#1	5.0338	-.01377	0.1184	.00425	.00909	-.00176	.00021	5.0508	-.01281	.00296	10.596
#2	4.9540	-.01091	.01611	.00521	.01115	-.00108	.00040	5.0418	-.01277	.00525	10.412
Check ? Value Range	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00216	-.00049	-.13596								
Stddev	.00080	.00037	.00340								
%RSD	37.115	73.947	2.5033								
#1	.00159	-.00024	-.13836								
#2	.00272	-.00075	-.13355								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3101.8	52364.	5615.8								
Stddev	1.6	97.	180.3								
%RSD	.05294	.18450	3.2110								
#1	3100.6	52295.	5743.3								
#2	3103.0	52432.	5488.3								

Sample Name: CCV-3290307 Acquired: 5/28/2015 11:16:53 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48757	.51873	.99659	.51602	.46843	.47690	-.00154	4.8153	.51234	.50379	.48671	.49258	2.4799
Stddev	.00075	.00214	.00813	.00221	.00115	.00173	.00020	.0187	.00171	.00459	.00789	.00081	.0080
%RSD	.15283	.41271	.81599	.42788	.24565	.36258	12.845	.38815	.33399	.91025	1.6215	.16523	.32062
#1	.48704	.51722	1.0023	.51758	.46762	.47568	-.00140	4.8021	.51113	.50703	.49229	.49315	2.4743
#2	.48810	.52025	.99084	.51446	.46924	.47812	-.00168	4.8285	.51355	.50055	.48113	.49200	2.4855

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.399	.94657	19.541	.51121	.49608	4.8791	.50379	1.0256	1.0111	-.00116	1.0123	1.0130	5.0127
Stddev	.182	.00467	.022	.00003	.00417	.0232	.00428	.0092	.0101	.00136	.0030	.0181	.0675
%RSD	.38409	.49358	.11355	.00640	.83995	.47489	.84900	.90162	.99806	117.23	.29410	1.7886	1.3472
#1	47.271	.94326	19.525	.51118	.49902	4.8627	.50681	1.0322	1.0182	-.00212	1.0144	1.0259	4.9650
#2	47.528	.94987	19.557	.51123	.49313	4.8955	.50076	1.0191	1.0040	-.00020	1.0102	1.0002	5.0605

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.727	1.0103	.47419	-.00636	.49881	1.0352	-.00524	.51174	.51798	.47774
Stddev	.145	.0078	.00225	.00163	.00014	.0058	.01135	.00354	.00243	.00539
%RSD	1.3472	.77541	.47531	25.633	.02817	.55855	216.51	.69094	.46854	1.1279
#1	10.625	1.0159	.47260	-.00751	.49891	1.0393	.00278	.50924	.51627	.47393
#2	10.829	1.0048	.47578	-.00520	.49871	1.0311	-.01326	.51424	.51970	.48155

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3162.5	54222.	5678.3								
Stddev	25.1	249.	49.4								
%RSD	.79423	.45999	.86911								
#1	3180.3	54398.	5713.2								
#2	3144.7	54046.	5643.4								

Sample Name: CCB Acquired: 5/28/2015 11:19:17 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

ELEM	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
AVG	.00053	-.00106	W -.00537	.00124	-.00021	-.00019	-.00581	.00447	.00032	-.00026	.00017
STDDEV	.00023	.00023	.00012	.00173	.00025	.00006	.00282	.00013	.00010	.00015	.00002
%RSD	43.338	22.129	2.2761	139.98	120.69	30.050	48.637	2.9007	29.794	56.469	12.298
#1	.00037	-.00089	-.00528	.00246	-.00003	-.00023	-.00381	.00456	.00039	-.00016	.00015
#2	.00069	-.00122	-.00545	.00001	-.00038	-.00015	-.00780	.00438	.00025	-.00036	.00018
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
ELEM	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
AVG	-.00026	.00041	.03475	.00155	.00194	.00001	.00014	.01646	.00011	-.00277	-.00072
STDDEV	.00003	.00094	.01463	.00267	.00159	.00000	.00044	.00140	.00020	.00200	.00252
%RSD	12.694	232.53	42.082	172.29	81.962	25.321	318.81	8.5353	192.98	72.099	352.64
#1	-.00029	-.00026	.02441	-.00034	.00307	.00001	-.00017	.01547	-.00004	-.00136	-.00250
#2	-.00024	.00107	.04510	.00344	.00082	.00001	.00045	.01745	.00025	-.00418	.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
ELEM	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
AVG	-.00123	.00231	.00409	.01813	.03879	-.00069	-.00007	.00054	-.00021	.00114	-.03774
STDDEV	.00091	.00453	.00238	.00130	.00278	.00062	.00015	.00200	.00043	.00419	.04083
%RSD	74.287	196.51	58.267	7.1773	7.1773	90.228	220.46	369.12	200.93	368.50	108.18
#1	-.00188	.00551	.00577	.01721	.03682	-.00025	-.00018	-.00087	.00009	.00410	-.06661
#2	-.00058	-.00090	.00240	.01905	.04076	-.00112	.00004	.00196	-.00051	-.00183	-.00887
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
ELEM	V_2924	Zn2062	Zr3391								
UNITS	ppm	ppm	ppm								
AVG	-.00042	.00037	-.00093								
STDDEV	.00044	.00040	.00050								
%RSD	104.56	108.89	53.886								
#1	-.00073	.00008	-.00058								
#2	-.00011	.00065	-.00129								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
INT. STD.	Y_2243	Y_3600	Y_3774								
UNITS	Cts/S	Cts/S	Cts/S								
AVG	3216.2	52636.	5274.4								
STDDEV	32.5	1244.	74.1								
%RSD	1.0117	2.3638	1.4057								
#1	3193.2	51757.	5326.8								
#2	3239.2	53516.	5222.0								

Sample Name: CCVL3296658 Acquired: 5/28/2015 11:21:34 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00964	.10775	F .00690	.10201	.00969	.00092	.10436	.19824	.00553	.00975	.01021	.01452
Stddev	.00033	.00054	.00374	.00023	.00021	.00019	.00210	.00151	.00013	.00007	.00038	.00017
%RSD	3.3754	.49736	54.205	.22122	2.1772	20.731	2.0130	.75992	2.3447	.69304	3.7563	1.1485
#1	.00987	.10813	.00955	.10217	.00984	.00079	.10288	.19930	.00544	.00970	.01049	.01464
#2	.00941	.10737	.00426	.10185	.00954	.00106	.10585	.19717	.00562	.00980	.00994	.01440

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01500 -30.000%	Chk Pass								
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10328	2.9943	.01113	.20596	.01086	.01994	1.0441	.04143	2.9489	.00988	.00158	.01025
Stddev	.00265	.0503	.00057	.00509	.00001	.00014	.0091	.00122	.0082	.00004	.00211	.00031
%RSD	2.5630	1.6786	5.1539	2.4713	.06147	.72603	.86856	2.9480	.27923	.35630	133.71	2.9807
#1	.10515	3.0298	.01072	.20956	.01085	.01984	1.0505	.04056	2.9548	.00990	.00009	.01046
#2	.10141	2.9587	.01153	.20236	.01086	.02005	1.0377	.04229	2.9431	.00986	.00308	.01003

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01866	.51794	1.1084	.10148	.00974	.01650	.01025	.01815	F .08149	.01026	.02183	.01401
Stddev	.00059	.00659	.0141	.00043	.00017	.00095	.00036	.00238	.04928	.00026	.00023	.00083
%RSD	3.1809	1.2721	1.2721	.42293	1.7924	5.7339	3.5250	13.105	60.480	2.5597	1.0709	5.9199
#1	.01824	.52260	1.1184	.10118	.00986	.01583	.01051	.01647	.04664	.01008	.02199	.01460
#2	.01908	.51329	1.0984	.10179	.00961	.01717	.01000	.01983	.11633	.01045	.02166	.01343

Check ? Value Range	Chk Pass	Chk Fail .06000 30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3231.2	55241.	5730.7
Stddev	4.0	136.	8.5
%RSD	.12272		.24620
#1	3234.0		55145.
#2	3228.4		55337.
	5724.7		5736.7

Sample Name: 280-69713-I-1-A Acquired: 5/28/2015 11:24:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00017	-.00045	-.00579	1.2321	.01664	-.00029	-.00449	536.72	-.00070
#2	.00043	.00022	.00183	1.2428	.01678	-.00016	-.00620	520.15	-.00086
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00114	.00065	.00110	.73484	18.061	.32535	192.20	.18314	.21876
#2	-.00095	.00061	.00094	.73410	.00390	.39	.00066	.00042	.19322
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	237.40	.00745	.01121	.00597	734.39	.00873	.00256	7.5872	16.237
#2	235.25	.00779	.01054	.00251	737.28	.01173	.01889	7.5056	16.062
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00054	6.4321	.00044	-.00039	-.01400	-.06605	-.00229	.09837	.00069
#2	-.00028	6.2889	.00272	-.00014	-.00729	-.03863	-.00233	.09947	-.00138
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2816.2	48708.	5648.1						
#2	2852.7	48152.	5608.0						

Sample Name: 280-69713-I-2-A Acquired: 5/28/2015 11:26:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.00148	W -.01350	1.4626	.02117	-.00016	-.00557	W 559.15	-.00055
Stddev	.00066	.00040	.00098	.0059	.00024	.00005	.00127	3.47	.00026
%RSD	131.57	26.723	7.2606	.40596	1.1253	30.023	22.813	.62063	47.636
#1	.00003	.00120	-.01280	1.4584	.02100	-.00013	-.00647	561.61	-.00036
#2	.00097	.00176	-.01419	1.4668	.02134	-.00020	-.00467	556.70	-.00074
Check ?	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00087	.00087	.00053	1.0217	20.784	.35692	212.84	.50115	.01180
Stddev	.00043	.00026	.00035	.0015	.108	.00046	.18	.00228	.00048
%RSD	48.902	29.856	67.039	.15171	.51774	.12797	.08456	.45457	4.0259
#1	-.00057	.00069	.00028	1.0228	20.860	.35660	212.97	.50276	.01214
#2	-.00117	.00106	.00078	1.0206	20.708	.35725	212.72	.49954	.01147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	275.27	.00579	.05120	.00071	F 774.43	.00949	.01182	9.5005	20.331
Stddev	1.00	.00025	.00592	.00073	1.59	.00123	.00010	.0170	.036
%RSD	.36303	4.2640	11.557	102.31	.20483	12.998	.84885	.17899	.17899
#1	275.97	.00561	.04701	.00020	775.55	.01036	.01189	9.5125	20.357
#2	274.56	.00596	.05538	.00123	773.31	.00862	.01175	9.4884	20.305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	W 6.9015	.00070	.00000	W -.01192	W -.05587	-.00147	.01298	.00046
Stddev	.00375	.0604	.00213	.0001	.00176	.04747	.00018	.00074	.00292
%RSD	1484.1	.87487	305.83	3864.3	14.745	84.966	12.148	5.6804	634.51
#1	-.00291	6.9442	.00220	.00005	-.01067	-.08943	-.00134	.01246	-.00160
#2	.00240	6.8588	-.00081	-.00005	-.01316	-.02230	-.00159	.01351	.00252
Check ?	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.0000 -.05000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2748.2	46546.	5489.8						
Stddev	15.0	132.	15.1						
%RSD	.54633	.28391	.27421						
#1	2758.8	46640.	5479.1						
#2	2737.5	46453.	5500.4						

Sample Name: 280-69713-I-3-A Acquired: 5/28/2015 11:29:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00118	As1890 ppm -.00236	B_2089 ppm -.00558	Ba4554 ppm .02309	Be3130 ppm -.00013	Bi2230 ppm -.00531	Ca3179 ppm W 543.10	Cd2288 ppm -.00052
#1	.00128	-.00246	-.00751	1.4488	.02314	-.00022	-.00622	542.17	-.00048
#2	.00109	-.00226	-.00365	1.4508	.02305	-.00003	-.00440	544.02	-.00056
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00123	Cu3247 ppm .00130	Fe2599 ppm .00240	K_7664 ppm 4.1350	Li6707 ppm 20.680	Mg2790 ppm .34735	Mn2576 ppm 204.96	Mo2020 ppm .68381
#1	-.00136	.00138	.00276	4.1278	20.772	.34629	204.77	.68252	.01082
#2	-.00111	.00122	.00204	4.1422	20.587	.34840	205.15	.68510	.01027
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 267.05	P_1782 ppm .00650	Pb2203 ppm .10509	S_1820 ppm .00374	Sb2068 ppm F 757.27	Se1960 ppm .01578	Si2881 ppm .00854	SiO2 ppm 9.0322
#1	268.07	.00606	.10325	.00266	759.65	.02037	.00741	8.9862	19.230
#2	266.03	.00694	.10692	.00482	754.89	.01119	.00968	9.0782	19.427
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00001	Th2837 ppm W 6.6531	Ti3349 ppm .00084	Tl1908 ppm .00028	U_3701 ppm -.01139	V_2924 ppm -.03942	Zn2062 ppm -.00262	Zr3391 ppm .18003
#1	.00236	6.6857	-.00017	.00045	-.01079	-.01808	-.00277	.18084	-.00093
#2	-.00235	6.6205	.00186	.00012	-.01200	-.06077	-.00247	.17922	-.00027
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2738.5	Y_3774 Cts/S 46811.	360.073 {941}	377.433 {89}			Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	2752.4	46856.	5287.0						
#2	2724.7	46765.	5274.4						

Sample Name: 280-69577-L-1-A Acquired: 5/28/2015 11:32:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00104	As1890 ppm .03213	B_2089 ppm .12646	W 15.271 0.028	Ba4554 ppm 1.0629	Be3130 ppm -.00006	Bi2230 ppm -.00335	Ca3179 ppm 211.48	Cd2288 ppm .00008
#1	.00126	.03296	.12747	15.251	1.0727	-.00008	-.00277	213.17	.00031	
#2	.00081	.03130	.12546	15.291	1.0531	-.00003	-.00393	209.78	-.00015	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .02019	Cu3247 ppm .04985	Fe2599 ppm .00147	K_7664 ppm 1.2701	Li6707 ppm W 297.83	Mg2790 ppm .10987	Mn2576 ppm 90.684	Mo2020 ppm .58769	
#1	.02034	.04966	.00177	1.2744	300.72	.10778	90.643	.58761	.01277	
#2	.02004	.05003	.00116	1.2659	294.94	.11197	90.725	.58777	.01176	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1541.9	P_1782 ppm .06032	Pb2203 ppm .85568	S_1820 ppm -.00113	Sb2068 ppm 83.441	Se1960 ppm .06617	Si2881 ppm .00859	SiO2 ppm 31.940	
#1	1554.4	.05980	.85671	.00020	83.269	.06924	.00733	31.884	68.232	
#2	1529.4	.06083	.85465	-.00246	83.613	.06310	.00985	31.995	68.469	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00494	Th2837 ppm 2.5426	Ti3349 ppm -.00152	Tl1908 ppm .05946	U_3701 ppm W -.01096	V_2924 ppm -.05856	Zn2062 ppm .06763	Zr3391 ppm .04871	
#1	.00482	2.5652	-.00194	.05965	-.01090	-.04116	.06755	.04939	.00185	
#2	.00507	2.5199	-.00109	.05927	-.01102	-.07596	.06772	.04802	.00130	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2745.9	Y_3774 Cts/S 5.9	360.073 {94}	377.433 {89}					
#1	2741.7	45125.	5501.0							
#2	2750.0	45303.	5574.3							

Sample Name: 280-69577-L-2-A Acquired: 5/28/2015 11:36:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00135	As1890 ppm .64658	B_2089 ppm .16500	W 72.620 .00577	Ba4554 ppm 3.9828	Be3130 ppm -.00016	Bi2230 ppm -.00101	Ca3179 ppm 391.77	Cd2288 ppm -.00060
#1	.00125	.64758	.16908	72.453	3.9710	-.00025	-.00162	389.33	-.00103	
#2	.00145	.64557	.16093	72.786	3.9946	-.00007	-.00040	394.22	-.00017	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .01039	Cu3247 ppm .03877	Fe2599 ppm .00671	K_7664 ppm 11.276	Li6707 ppm W 344.91	Mg2790 ppm .14545	Mn2576 ppm 232.81	Mo2020 ppm .51502	ppm .01349
#1	.01068	.03886	.00624	11.254	344.51	.14570	233.14	.51619	.01341	
#2	.01010	.03867	.00718	11.298	345.32	.14520	232.47	.51385	.01357	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 2775.1	P_1782 ppm .09884	Pb2203 ppm 3.0255	S_1820 ppm .00247	Sb2068 ppm 160.26	Se1960 ppm .03412	Si2881 ppm .00358	SiO2 ppm 36.871	ppm 78.903
#1	2764.8	.09954	3.0270	.00125	160.00	.03650	.00481	37.145	79.490	
#2	2785.4	.09814	3.0240	.00368	160.51	.03174	.00235	36.597	78.317	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 7.0547	Th2837 ppm .00432	Ti3349 ppm .10018	Tl1908 ppm -.01271	U_3701 ppm F -.15849	V_2924 ppm .01882	Zn2062 ppm .04314	Zr3391 ppm -.00114	
#1	.00541	7.0449	.00285	.10016	-.01470	-.11869	.01952	.04176	-.00056	
#2	.00464	7.0646	.00578	.10021	-.01071	-.19830	.01812	.04452	-.00172	
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2562.4	Y_3774 Cts/S 42536.	360.073 {94}	377.433 {89}	5363.4 .01325				
#1	2548.3	42622.	5362.9							
#2	2576.5	42450.	5363.9							

Sample Name: 280-69691-M-1-A Acquired: 5/28/2015 11:40:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.05449	.01375	.11557	.04488	.00003	-.00393	35.837	.00019
Stddev	.00035	.00066	.00025	.00530	.00045	.00002	.00240	.170	.00029
%RSD	59.156	1.2036	1.8383	4.5871	.99705	48.148	61.094	.47320	157.07
#1	.00035	.05403	.01393	.11932	.04456	.00005	-.00223	35.717	.00039
#2	.00085	.05496	.01357	.11182	.04519	.00002	-.00563	35.957	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00126	.00559	.23153	5.4573	.00943	3.4222	.03066	.59439
Stddev	.00002	.00015	.00022	.00206	.0432	.00206	.0206	.00012	.00047
%RSD	19.446	11.724	3.9641	.88977	.79128	21.889	.60245	.39332	.07959
#1	.00008	.00136	.00574	.23007	5.4268	.01089	3.4076	.03058	.59473
#2	.00010	.00115	.00543	.23299	5.4879	.00797	3.4368	.03075	.59406
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.955	.00872	.08704	.00096	9.2071	.00536	.00388	4.7171	10.095
Stddev	.073	.00036	.00323	.00155	.0742	.00221	.00039	.0405	.087
%RSD	.42905	4.1781	3.7155	160.96	.80575	41.306	10.126	.85944	.85944
#1	17.006	.00897	.08476	.00206	9.2596	.00693	.00360	4.6885	10.033
#2	16.903	.00846	.08933	-.00013	9.1547	.00380	.00416	4.7458	10.156
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	.16633	-.00047	.00092	-.00477	-.02941	.01224	.01915	.00017
Stddev	.00101	.00044	.00095	.00005	.00478	.02299	.00078	.00062	.00108
%RSD	116.67	.26381	200.71	4.9428	100.30	78.183	6.3601	3.2246	654.74
#1	.00157	.16602	-.00114	.00089	-.00815	-.01315	.01169	.01959	.00093
#2	.00015	.16664	.00020	.00096	-.00139	-.04567	.01279	.01871	-.00060
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	3158.0	54732.	5701.0						
Stddev	57.3	535.	44.0						
%RSD	1.8133	.97790	.77197						
#1	3198.5	54354.	5732.1						
#2	3117.5	55111.	5669.8						

Sample Name: 280-69642-H-1-D Acquired: 5/28/2015 11:42:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00068	As1890 ppm -.00198	B_2089 ppm .00108	W 17.450 W	Ba4554 ppm .51685	Be3130 ppm -.00003	Bi2230 ppm -.00500	Ca3179 ppm W 724.08	Cd2288 ppm -.00119
#1	.00098	-.00137	.00521	17.514	.51534	-.00011	-.00183	725.98	-.00107	
#2	.00038	-.00259	-.00304	17.386	.51835	.00004	-.00817	722.18	-.00130	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00695	Cu3247 ppm .00239	Fe2599 ppm .00130	K_7664 ppm 6.4159	Li6707 ppm 23.250	Mg2790 ppm 300.73	Mn2576 ppm 6.6495	Mo2020 ppm .01669	
#1	.00704	.00240	.00128	6.3996	23.124	.02499	300.54	6.6417	.01641	
#2	.00686	.00237	.00131	6.4322	23.376	.02519	300.93	6.6573	.01697	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1464.4	P_1782 ppm .15214	Pb2203 ppm .35595	S_1820 ppm -.00054	Sb2068 ppm 93.591	Se1960 ppm .02033	Si2881 ppm .01780	SiO2 ppm 20.844	
#1	1460.7	.15267	.35655	-.00006	93.897	.02246	.01732	20.792	44.495	
#2	1468.1	.15161	.35536	-.00102	93.286	.01820	.01828	20.895	44.716	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00079	Th2837 ppm 3.6689	Ti3349 ppm .00433	Tl1908 ppm .00021	U_3701 ppm W -.01680	V_2924 ppm F -.10099	Zn2062 ppm .00002	Zr3391 ppm .00395	
#1	-.00209	3.6585	.00481	.00014	-.01982	-.11183	.00028	.00412	.00111	
#2	.00052	3.6793	.00385	.00029	-.01379	-.09015	-.00025	.00377	.00021	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2681.9	Y_3774 Cts/S 45924.	360.073 {94}	377.433 {89}			Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}	
#1	2688.6	45972.	5517.9							
#2	2675.1	45876.	5495.2							

Sample Name: 280-69642-H-2-B Acquired: 5/28/2015 11:45:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	.03840	.11853	W 50.516	8.7359	.00002	.00326	422.65	-.00070
Stddev	.00043	.00103	.00230	.041	.0460	.00007	.00345	5.02	.00029
%RSD	55.213	2.6727	1.9432	.08136	.52688	388.11	105.90	1.1871	41.391
#1	.00108	.03767	.12015	50.487	8.7684	.00007	.00569	419.10	-.00091
#2	.00047	.03912	.11690	50.545	8.7034	-.00003	.00082	426.19	-.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00970	.02324	.04342	3.1062	F 813.32	.37362	492.26	.35947	.00357
Stddev	.00037	.00016	.00075	.0295	5.60	.00394	1.38	.00050	.00016
%RSD	3.8315	.69091	1.7318	.95114	.68831	1.0537	.28035	.13813	4.6051
#1	.00997	.02335	.04289	3.1271	817.28	.37083	491.28	.35982	.00369
#2	.00944	.02313	.04395	3.0853	809.37	.37640	493.23	.35912	.00346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 7503.7	.12483	1.0062	-.00134	59.206	.12927	.02119	40.095	85.804
Stddev	28.4	.00091	.0041	.00038	.026	.00300	.00366	.692	1.482
%RSD	.37880	.73180	.41076	28.134	.04427	2.3171	17.277	1.7268	1.7268
#1	7523.8	.12548	1.0091	-.00160	59.225	.13138	.01860	40.585	86.852
#2	7483.6	.12419	1.0033	-.00107	59.188	.12715	.02378	39.606	84.756
Check ?	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00365	W 9.2975	.00228	.02184	W -.01092	F -.11401	.01370	.00674	.00303
Stddev	.00065	.1084	.00167	.00012	.00289	.03005	.00072	.00083	.00124
%RSD	17.748	1.1654	73.160	.54605	26.459	26.357	5.2297	12.318	40.800
#1	.00319	9.2209	.00347	.02193	-.01296	-.09276	.01421	.00615	.00215
#2	.00410	9.3741	.00110	.02176	-.00887	-.13526	.01320	.00733	.00390
Check ?	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2316.1	37940.	4991.7	1.	16.0				
Stddev	1.2	.00338	.32132						
#1	2317.0	37941.	5003.1						
#2	2315.3	37939.	4980.4						

Sample Name: 280-69700-H-1-A Acquired: 5/28/2015 11:49:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.13680	.24000	W 19.327	6.8665	.00017	.00371	158.85	.00036
Stddev	.00023	.00071	.01169	.001	.0294	.00001	.00288	.84	.00059
%RSD	40.350	.51895	4.8699	.00305	.42820	3.9850	77.540	.52866	162.15
#1	.00040	.13630	.23173	19.327	6.8873	.00018	.00574	159.45	.00078
#2	.00072	.13731	.24826	19.327	6.8457	.00017	.00168	158.26	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01297	.02828	.00703	2.9745	F 1165.3	.15418	190.85	.51328	.02280
Stddev	.00005	.00005	.00017	.0152	22.4	.00049	.85	.00125	.00012
%RSD	.37117	.18262	2.3766	.50937	1.9232	.31669	.44277	.24450	.53717
#1	.01294	.02824	.00715	2.9852	1181.1	.15452	191.45	.51417	.02288
#2	.01301	.02831	.00691	2.9638	1149.4	.15383	190.26	.51240	.02271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3951.2	.04955	1.2715	-.00081	54.629	.09203	.01932	35.818	76.650
Stddev	19.1	.00074	.0014	.00117	.018	.00050	.00289	.329	.704
%RSD	.48261	1.4970	.10608	143.72	.03354	.53927	14.956	.91788	.91788
#1	3964.7	.04902	1.2705	.00001	54.642	.09238	.02136	36.050	77.148
#2	3937.7	.05007	1.2724	-.00164	54.616	.09168	.01728	35.585	76.153
Check ?	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00350	W 5.1148	-.00064	.03312	W -.01058	W -.06186	.05543	.00497	.00204
Stddev	.00083	.0267	.00252	.00039	.00488	.02696	.00140	.00009	.00085
%RSD	23.698	.52147	391.87	1.1790	46.154	43.584	2.5276	1.8679	41.729
#1	.00291	5.1337	-.00243	.03340	-.00713	-.04280	.05642	.00490	.00264
#2	.00409	5.0959	.00114	.03285	-.01403	-.08093	.05444	.00503	.00144
Check ?	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.0000 -.05000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2548.4	42617.	5500.0						
Stddev	6.6	21.	61.6						
%RSD	.25836	.04985	1.1207						
#1	2553.1	42602.	5456.4						
#2	2543.7	42632.	5543.5						

Sample Name: 280-69700-H-2-A Acquired: 5/28/2015 11:53:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278900 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00110	As1890 ppm .30936	B_2089 ppm .25277	W 20.354	Ba4554 ppm 9.3291	Be3130 ppm .00007	Bi2230 ppm .00387	Ca3179 ppm 159.00	Cd2288 ppm -.00009
#1	.00100	.30964	.25888	20.384	9.1540	-.00006	.00362	158.42	-.00012	
#2	.00121	.30908	.24667	20.325	9.5041	.00020	.00412	159.57	-.00005	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .01447	Cu3247 ppm .02944	Fe2599 ppm .00172	K_7664 ppm 2.3532	Li6707 ppm F 1448.9	Mg2790 ppm .16660	Mn2576 ppm 224.42	Mo2020 ppm .43451	ppm .02358
#1	.01448	.02940	.00203	2.3573	1464.0	.16586	224.58	.43493	.02344	
#2	.01447	.02948	.00141	2.3491	1433.8	.16734	224.26	.43409	.02371	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 4827.5	P_1782 ppm .05241	Pb2203 ppm 1.3220	S_1820 ppm -.00232	Sb2068 ppm 68.667	Se1960 ppm .08649	Si2881 ppm .01688	SiO2 ppm 39.120	ppm 83.716
#1	4805.5	.05220	1.3318	-.00476	68.585	.08461	.01001	39.468	84.461	
#2	4849.5	.05261	1.3122	.00011	68.749	.08838	.02374	38.772	82.971	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 6.0413	Th2837 ppm .00108	Ti3349 ppm .04011	Tl1908 ppm -.01078	U_3701 ppm W -.06917	V_2924 ppm .05439	Zn2062 ppm .00721	Zr3391 ppm .00259	
#1	.00425	6.0433	.00067	.03998	-.00799	-.03372	.05428	.00814	.00211	
#2	.00262	6.0393	.00149	.04024	-.01357	-.10462	.05450	.00627	.00307	
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2468.7	Y_3774 Cts/S 40051.	360.073 {94}	377.433 {89}	5043.7	5043.7	206.200 {163}	339.198 {99}	Zr3391 ppm 26.196
#1	2450.7	40036.	5078.6							
#2	2486.7	40065.	5008.8							

Sample Name: CCVH-3283796 Acquired: 5/28/2015 11:57:31 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	-.00497	49.432	.00073	.07140	.00036	.00021	1.0343	.02989	-.00019	-.00070	.00055
Stddev	.00041	.098	.00258	.00167	.00000	.00001	.0015	.00039	.00007	.00009	.00001
%RSD	8.2218	.19924	351.84	2.3387	.96952	4.1850	.14224	1.2938	36.007	12.210	2.2781
#1	-.00526	49.501	-.00109	.07258	.00036	.00021	1.0333	.02961	-.00024	-.00076	.00054
#2	-.00469	49.362	.00255	.07022	.00037	.00022	1.0354	.03016	-.00014	-.00064	.00056
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	.00086	48.386	1.3515	.00217	.06393	-.00169	-.00075	246.94	.00273	.00872	.00014
Stddev	.00014	.077	.0422	.00061	.00159	.00004	.00020	.21	.00025	.00123	.00074
%RSD	15.728	.15999	3.1198	27.865	2.4810	2.5743	26.733	.08555	9.1401	14.136	544.78
#1	.00096	48.441	1.3813	.00175	.06505	-.00173	-.00061	246.79	.00255	.00960	-.00039
#2	.00077	48.332	1.3217	.00260	.06281	-.00166	-.00090	247.09	.00290	.00785	.00066
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	5.0619	-.01212	.00942	.12569	.26898	-.00244	.00038	5.0601	-.01244	.00097	W 10.543
Stddev	.0241	.00139	.00048	.02662	.05696	.00133	.00007	.0043	.00021	.00034	.022
%RSD	.47678	11.434	5.1140	21.175	21.175	54.754	17.225	.08410	1.6639	35.377	.20694
#1	5.0448	-.01114	.00908	.14451	.30926	-.00338	.00043	5.0631	-.01230	.00121	10.558
#2	5.0789	-.01310	.00976	.10687	.22871	-.00149	.00034	5.0571	-.01259	.00073	10.527
Check ? Value Range	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00232	-.00118	-.13821								
Stddev	.00046	.00012	.00120								
%RSD	19.704	10.365	.86921								
#1	.00199	-.00109	-.13736								
#2	.00264	-.00126	-.13906								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3103.0	52966.	5643.5								
Stddev	7.6	341.	32.1								
%RSD	.24507	.64363	.56912								
#1	3108.4	53207.	5620.8								
#2	3097.7	52725.	5666.2								

Sample Name: CCV-3290307 Acquired: 5/28/2015 12:00:02 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.48813	.51655	.99477	F .57520	.46262	.45990	-.00280	4.6431	.51457	.50215	.47587	.49211
Stddev	.00352	.00109	.00629	.00431	.00030	.00078	.00321	.0032	.00041	.00121	.00252	.00054
%RSD	.72169	.21126	.63237	.74963	.06492	.16896	114.44	.06956	.07907	.24097	.52898	.11038
#1	.49062	.51578	.99922	.57825	.46283	.46045	-.00053	4.6454	.51486	.50130	.47409	.49249
#2	.48563	.51733	.99032	.57215	.46241	.45935	-.00507	4.6409	.51429	.50301	.47765	.49172
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3554	47.494	.94855	19.454	.51077	.49434	5.2711	.50189	1.0357	1.0034	.03332	1.0143
Stddev	.0064	.072	.00352	.088	.00169	.00024	.0142	.00115	.0044	.0022	.00478	.0013
%RSD	.27268	.15118	.37151	.45246	.33031	.04939	.26931	.22937	.42728	.21642	14.352	.12519
#1	2.3600	47.544	.95105	19.517	.51196	.49417	5.2812	.50107	1.0388	1.0050	.03670	1.0152
#2	2.3509	47.443	.94606	19.392	.50958	.49452	5.2611	.50270	1.0325	1.0019	.02994	1.0134
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0105	5.2576	11.251	1.0029	.46629	-.00435	.49886	1.0302	-.02561	.51566	.51128	.46074
Stddev	.0041	.0965	.206	.0064	.00026	.00053	.00248	.0032	.00241	.00543	.00167	.00364
%RSD	.40712	1.8353	1.8353	.63753	.05479	12.279	.49625	.31064	9.4056	1.0522	.32716	.79081
#1	1.0134	5.1894	11.105	1.0074	.46647	-.00473	.50061	1.0280	-.02391	.51949	.51246	.45816
#2	1.0076	5.3259	11.397	.99838	.46610	-.00397	.49711	1.0325	-.02731	.51182	.51009	.46331
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3106.6	53319.	5596.9									
Stddev	9.9	20.	24.1									
%RSD	.31892	.03771	.43118									
#1	3099.5	53305.	5579.8									
#2	3113.6	53333.	5613.9									

Sample Name: CCB Acquired: 5/28/2015 12:02:26 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00050	Al1670 ppm -.00103	As1890 ppm -.00480	B_2089 ppm .04994	Ba4554 ppm .00040	Be3130 ppm -.00003	Bi2230 ppm -.00470	Ca3179 ppm .00237	Cd2288 ppm .00015	Co2286 ppm -.00026	Cr2055 ppm .00012	Cu3247 ppm -.00028
#1	.00067	-.00116	-.00396	.04964	.00070	-.00002	-.00520	.00550	-.00003	-.00019	.00002	.00005
#2	.00033	-.00090	-.00564	.05024	.00009	-.00004	-.00419	-.00075	.00034	-.00032	.00021	-.00060
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm F .17423	K_7664 ppm .43528	Li6707 ppm .00133	Mg2790 ppm -.00103	Mn2576 ppm .00118	Mo2020 ppm .00015	Na5895 ppm .43093	Ni2316 ppm .00025	P_1782 ppm .00034	Pb2203 ppm -.00113	S_1820 ppm .02599	Sb2068 ppm .00472
#1	.17288	.42710	.00022	-.00449	.00112	.00010	.42274	.00038	-.00112	-.00142	.02380	.00580
#2	.17557	.44346	.00245	.00244	.00125	.00020	.43912	.00011	.00180	-.00084	.02818	.00364
Check ? High Limit Low Limit	Chk Fail .10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Fail -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm .00257	Si2881 ppm F .17855	SiO2 ppm .38210	Sn1899 ppm .00005	Sr4077 ppm .00000	Th2837 ppm .00079	Ti3349 ppm .00018	TI1908 ppm .00103	U_3701 ppm -.02991	V_2924 ppm -.00005	Zn2062 ppm -.00002	Zr3391 ppm .00036
#1	.00252	.19092	.40857	-.00035	.00001	-.00111	.00037	.00025	-.01852	-.00005	.00010	.00125
#2	.00262	.16618	.35563	.00046	.00000	.00270	-.00001	.00180	-.04131	-.00004	-.00014	-.00054
Check ? High Limit Low Limit	Chk Pass	Chk Fail .10000	Chk Fail .21400	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3166.7	Y_3600 Cts/S 54860.	Y_3774 Cts/S 5481.5									
#1	3162.7	54785.	5503.5									
#2	3170.6	54935.	5459.5									

Sample Name: CCVL3296658 Acquired: 5/28/2015 12:04:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00953	.10595	F .00931	F .14847	.00937	.00107	.10497	.19496	.00563	.01029	.00996	.01557
Stddev	.00003	.00001	.00437	.00046	.00012	.00005	.00039	.00000	.00002	.00018	.00005	.00008
%RSD	.35288	.01026	46.936	.31118	1.2781	4.6179	.37482	.00235	.43329	1.7884	.50563	.52283
#1	.00951	.10595	.01240	.14880	.00946	.00104	.10525	.19496	.00565	.01016	.00992	.01563
#2	.00956	.10596	.00622	.14814	.00929	.00111	.10470	.19496	.00562	.01042	.00999	.01551

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .1500 -30.000%	Chk Fail .10000 30.000%	Chk Pass							
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09570	3.3220	.01137	.20844	.01088	.02003	F 1.3757	.04156	2.9725	.00885	.02456	.01171
Stddev	.00243	.0055	.00004	.00278	.00002	.00017	.0132	.00046	.0038	.00120	.00066	.00038
%RSD	2.5369	.16455	.38043	1.3339	.15102	.82708	.95615	1.0987	.12893	13.575	2.7065	3.2256
#1	.09741	3.3181	.01140	.20648	.01089	.02015	1.3850	.04188	2.9698	.00800	.02409	.01198
#2	.09398	3.3258	.01134	.21041	.01086	.01991	1.3664	.04124	2.9752	.00970	.02503	.01144

Check ? Value Range	Chk Pass	Chk Fail 1.0000 30.000%	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .02081	.58100	1.2433	.10363	.00974	.01584	.01026	.01615	.04623	.00962	.02155	.01356
Stddev	.00160	.00793	.0170	.00021	.00013	.00277	.00018	.00200	.01300	.00044	.00085	.00093
%RSD	7.6665	1.3655	1.3655	.20270	1.2998	17.469	1.7149	12.388	28.123	4.5865	3.9441	6.8841
#1	.01968	.57539	1.2313	.10378	.00965	.01389	.01014	.01757	.05543	.00993	.02095	.01422
#2	.02194	.58661	1.2553	.10349	.00983	.01780	.01039	.01474	.03704	.00931	.02215	.01290

Check ? Value Range	Chk Fail .1500 30.000%	Chk Pass										
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3187.2	55506.	5683.7
Stddev	3.1	43.	58.2
%RSD	.09800	.07695	1.0231
#1	3189.4	55537.	5642.5
#2	3185.0	55476.	5724.8

Sample Name: MB 280-278890/1-A Acquired: 5/28/2015 12:07:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00082	.00243	-.00321	.04041	.00011	.00006	-.00220	.01438	.00010
Stddev	.00001	.00077	.00675	.00243	.00003	.00015	.00328	.00019	.00005
%RSD	1.4576	31.547	210.68	6.0099	31.250	237.94	149.10	1.3020	50.101
#1	.00083	.00189	-.00798	.04213	.00009	-.00004	.00012	.01425	.00006
#2	.00081	.00297	.00157	.03869	.00014	.00017	-.00451	.01452	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	.00011	.00036	.01662	.33516	.00015	.00613	.00036	-.00008
Stddev	.00030	.00006	.00007	.00090	.03147	.00101	.00301	.00008	.00007
%RSD	91.213	51.474	20.624	5.4277	9.3890	680.84	49.069	22.240	90.860
#1	-.00012	.00007	.00041	.01726	.35741	-.00057	.00826	.00042	-.00013
#2	-.00055	.00015	.00031	.01598	.31291	.00086	.00400	.00030	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.37980	.00020	-.00105	.00045	.03103	.00265	.00109	.05000	.10701
Stddev	.00760	.00037	.00128	.00133	.00436	.00088	.00225	.00844	.01806
%RSD	2.0008	186.18	121.81	292.34	14.057	33.152	206.01	16.874	16.874
#1	.38517	-.00006	-.00196	.00139	.02795	.00327	-.00050	.05597	.11978
#2	.37443	.00046	-.00015	-.00048	.03412	.00202	.00268	.04404	.09424
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.00011	-.00041	-.00005	.00168	-.00509	.00000	.00073	.00088
Stddev	.00010	.00003	.00178	.00017	.00095	.01491	.0005	.00023	.00147
%RSD	17.240	25.382	435.55	315.44	56.460	292.60	524120.	31.971	167.07
#1	.00067	.00009	.00085	-.00017	.00101	.00545	.00034	.00056	.00192
#2	.00053	.00013	-.00166	.00006	.00235	-.01564	-.00034	.00089	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3197.7	56120.	5731.6						
Stddev	9.8	135.	26.7						
%RSD	.30775	.24121	.46659						
#1	3204.7	56025.	5750.5						
#2	3190.8	56216.	5712.7						

Sample Name: 280-69522-D-1-A Acquired: 5/28/2015 12:09:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00059	1.6215	-.00517	.05364	.04733	.00008	-.00179	8.0897	.00018
#2	.00038	1.6312	-.00323	.05403	.04872	.00012	-.00337	8.3933	.00043
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00032	.00230	.00601	1.7969	1.8325	.00341	4.6829	.07684	-.00045
#2	.00014	.00229	.00627	1.8518	1.8448	.00358	4.6802	.07678	-.00020
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	4.8866	.00749	.05351	-.00212	.50621	.00094	.00215	12.627	27.022
#2	5.1062	.00663	.04951	-.00272	.50627	.00467	.00577	13.290	28.440
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00269	.06065	-.00101	.04232	-.00203	-.03292	.00884	.00646	.00020
#2	.00041	.06409	.00278	.04206	.00020	-.03987	.00923	.00495	.00217
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3193.5	54532.	5715.8						
#2	3154.0	54178.	5658.3						

Sample Name: 280-69522-D-1-A SD@5 Acquired: 5/28/2015 12:12:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00047	.36396	-.00620	.03675	.00862	.00016	-.00204	1.5319	-.00008
#2	-.00007	.37562	-.00300	.03626	.00884	-.00009	-.00357	1.5988	.00016
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00002	.00037	.00103	.33985	.50951	.00279	.88044	.01458	-.00005
#2	-.00028	.00062	.00050	.36122	.57636	.00078	.90128	.01479	-.00020
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	1.1753	.00148	.00870	.00082	.11280	.00059	.00307	2.4412	5.2242
#2	.0249	.00007	.00166	.00048	.00737	.00135	.00104	.0809	.1731
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00276	.01111	-.00116	.00885	.00557	.05714	.00205	.00020	-.00102
#2	.00017	.01166	.00018	.00885	-.00138	-.01160	.00090	.00097	.00179
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3160.4	53370.	5473.5						
#2	3181.7	53297.	5245.4						

Sample Name: 280-69522-D-1-B MS Acquired: 5/28/2015 12:14:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04517	6.2399	1.0071	1.1011	1.9425	.04711	2.0539	54.496	.10528
#2	.04656	6.3582	.99192	1.0905	1.9861	.04815	2.0442	55.625	.10462
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49339	.19167	.25576	3.4774	50.363	.97655	53.343	.59078	1.0418
#2	.49166	.19201	.25587	3.5674	51.581	.99461	53.521	.58959	1.0350
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	56.496	.50018	10.743	.49279	2.6008	.52788	2.0553	25.233	53.999
#2	58.087	.49769	10.633	.49025	2.5846	.53039	2.0486	25.822	55.259
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0256	1.0140	1.0233	1.0797	1.9978	2.0990	.53838	.51145	.44488
#2	2.0188	1.0363	1.0254	1.0784	1.9869	2.1079	.53341	.51047	.45630
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3053.0	52357.	5483.5						
#2	3085.8	52246.	5444.0						

Sample Name: 280-69522-D-1-C MSD Acquired: 5/28/2015 12:17:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04372	5.5977	.98585	1.0626	1.8986	.04593	F 1.9919	53.364	.10211
Stddev	.00003	.0223	.00022	.0030	.0109	.00001	.0191	.252	.00038
%RSD	.06970	.39836	.02187	.28455	.57199	.02107	.96004	.47313	.37107
#1	.04374	5.6134	.98600	1.0605	1.8909	.04593	1.9784	53.185	.10184
#2	.04370	5.5819	.98570	1.0648	1.9063	.04594	2.0055	53.542	.10238
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48068	W .18566	.25034	3.1161	49.228	.95415	52.422	.57895	1.0128
Stddev	.00021	.00148	.00158	.0169	.304	.00474	.039	.00007	.0018
%RSD	.04459	.79538	.63173	.54172	.61659	.49725	.07405	.01268	.17955
#1	.48083	.18461	.25146	3.1042	49.013	.95080	52.394	.57900	1.0115
#2	.48053	.18670	.24922	3.1281	49.443	.95751	52.449	.57890	1.0141
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.525	.48729	W 10.361	.48147	2.5281	.51327	2.0001	24.849	53.176
Stddev	.156	.00061	.034	.00312	.0323	.01189	.0341	.132	.282
%RSD	.28041	.12446	.33250	.64849	1.2794	2.3166	1.7061	.52954	.52954
#1	55.415	.48772	10.337	.48368	2.5052	.50487	1.9760	24.756	52.977
#2	55.635	.48686	10.386	.47926	2.5509	.52168	2.0242	24.942	53.375
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.1.0000							
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9839	.99120	.99946	1.0523	1.9538	2.1032	.52490	.50040	.43488
Stddev	.0091	.00427	.00426	.0004	.0092	.0028	.00011	.00034	.00292
%RSD	.46093	.43050	.42626	.04314	.46988	.13525	.02075	.06734	.67146
#1	1.9774	.98819	1.0025	1.0519	1.9473	2.1052	.52482	.50016	.43281
#2	1.9904	.99422	.99644	1.0526	1.9603	2.1012	.52497	.50063	.43694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3053.1	51873.	5520.7						
Stddev	26.4	250.	28.7						
%RSD	.86430	.48182	.52036						
#1	3034.4	52049.	5541.0						
#2	3071.7	51696.	5500.4						

Sample Name: 280-69522-D-2-A Acquired: 5/28/2015 12:19:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm 8.7852	As1890 ppm .00021	B_2089 ppm .32588	Ba4554 ppm .08448	Be3130 ppm .00021	Bi2230 ppm -.00290	Ca3179 ppm 14.841	Cd2288 ppm .00045
#1	.00035	8.8454	-.00161	.32595	.08483	.00015	-.00154	14.918	.00049
#2	.00025	8.7250	.00203	.32582	.08412	.00027	-.00426	14.765	.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .01220	Cu3247 ppm .01170	Fe2599 ppm 8.0942	K_7664 ppm 2.6360	Li6707 ppm .00573	Mg2790 ppm 8.6726	Mn2576 ppm .07225	Mo2020 ppm .00045
#1	.00103	.01215	.01117	8.1325	2.6532	.00722	8.6438	.07176	.00050
#2	.00127	.01224	.01224	8.0560	2.6189	.00425	8.7015	.07274	.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .01850	P_1782 ppm .13509	Pb2203 ppm -.00046	S_1820 ppm 2.9838	Sb2068 ppm -.00023	Se1960 ppm .00389	Si2881 ppm 20.833	SiO2 ppm 44.583
#1	13.712	.01852	.13492	-.00063	2.9865	.00018	.00786	20.826	44.567
#2	14.558	.01848	.13526	-.00029	2.9811	-.00064	-.00008	20.841	44.599
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00241	Th2837 ppm .12050	Ti3349 ppm .00215	Tl1908 ppm .21813	U_3701 ppm -.00114	V_2924 ppm -.04074	Zn2062 ppm .02453	Zr3391 ppm .01958
#1	.00346	.12100	.00053	.21796	-.00147	-.03647	.02429	.02014	.00456
#2	.00137	.11999	.00377	.21831	-.00082	-.04501	.02478	.01902	.00563
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 360.073 {94}	Y_3774 Cts/S 377.433 {89}						
#1	3253.4	55287.	5647.0						
#2	3257.1	55709.	5726.1						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 12:21:56 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00485	Al3092 ppm 49.735	As1890 ppm -.00568	B_2089 ppm .02478	Ba4554 ppm .00067	Be3130 ppm .00007	Bi2230 ppm 1.0308	Ca3179 ppm .02817	Cd2288 ppm -.00015	Co2286 ppm -.00064	Cr2055 ppm .00075
#1	-.00463	49.716	-.00847	.02488	.00081	.00011	1.0325	.02774	-.00002	-.00063	.00064
#2	-.00507	49.754	-.00289	.02467	.00054	.00004	1.0291	.02860	-.00028	-.00065	.00087
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00097	Fe2714 ppm 48.829	K_7664 ppm .24463	Li6707 ppm .00309	Mg2790 ppm .05686	Mn2576 ppm -.00157	Mo2020 ppm -.00069	Na8183 ppm 246.79	Ni2316 ppm .00263	P_1782 ppm .00551	Pb2203 ppm -.00007
#1	.00119	48.821	.22924	.00308	.04932	-.00162	-.00113	247.64	.00297	.00339	-.00128
#2	.00075	48.836	.26002	.00311	.06441	-.00153	-.00025	245.94	.00228	.00762	.00115
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0319	Sb2068 ppm -.01080	Se1960 ppm .01171	Si2881 ppm -.01110	SiO2 ppm -.02374	Sn1899 ppm -.00180	Sr4077 ppm .00035	Th2837 ppm 5.0603	Ti3349 ppm -.01235	TI1908 ppm .00323	U_3701 ppm W 10.543
#1	5.0303	-.00929	0.1001	-.02127	-.04551	-.00213	.00029	5.0788	-.01298	.00381	10.533
#2	5.0335	-.01231	.01342	-.00092	-.00198	-.00147	.00040	5.0418	-.01171	.00265	10.553
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00249	Zn2062 ppm -.00111	Zr3391 ppm -.14227								
#1	.00230	-.00120	-.14390								
#2	.00267	-.00103	-.14064								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3106.1	Y_3600 Cts/S 52576.	Y_3774 Cts/S 5527.4								
#1	3107.1	52482.	5543.7								
#2	3105.2	52671.	5511.0								

Sample Name: CCV-3290307 Acquired: 5/28/2015 12:24:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48951	.51810	1.0011	.53974	.46829	.46520	-.00445	4.7197	.51488	.49859	.47573	.49338	2.4104
Stddev	.00097	.00028	.0015	.00249	.00736	.00826	.00203	.0773	.00011	.00112	.00093	.00045	.0367
%RSD	.19839	.05452	.15250	.46133	1.5715	1.7766	45.587	1.6373	.02135	.22543	.19476	.09044	1.5204
#1	.49020	.51790	1.0022	.54150	.46308	.45935	-.00302	4.6651	.51480	.49938	.47638	.49307	2.3845
#2	.48882	.51830	1.0001	.53798	.47349	.47104	-.00589	4.7744	.51496	.49779	.47507	.49370	2.4363

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.995	.95474	19.564	.51018	.48978	5.0600	.50090	1.0251	.99895	.01155	1.0196	1.0176	4.8389
Stddev	.714	.01355	.062	.00192	.00062	.0959	.00306	.0027	.00079	.00389	.0060	.0056	.1046
%RSD	1.4880	1.4189	.31774	.37560	.12612	1.8950	.61047	.25890	.07864	33.728	.58899	.55559	2.1614
#1	47.490	.94517	19.608	.51154	.49022	4.9922	.50306	1.0269	.99950	.00879	1.0238	1.0216	4.7650
#2	48.500	.96432	19.520	.50883	.48935	5.1278	.49874	1.0232	.99839	.01430	1.0153	1.0136	4.9129

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.355	.99725	.47146	-.00464	.49643	1.0304	-.02070	.51693	.51358	.46374
Stddev	.224	.00020	.00757	.00061	.00156	.0020	.02345	.00141	.00172	.00423
%RSD	2.1614	.01964	1.6062	13.044	.31408	.19595	113.28	.27196	.33434	.91263
#1	10.197	.99739	.46610	-.00421	.49753	1.0318	-.03728	.51792	.51237	.46075
#2	10.514	.99711	.47681	-.00507	.49533	1.0290	-.00412	.51593	.51480	.46673

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass								
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass				
Avg	3133.5	53263.	5397.5										
Stddev	6.9	81.	52.7										
%RSD	.21916	.15249	.97616										
#1	3128.6	53206.	5434.7										
#2	3138.3	53320.	5360.2										

Sample Name: CCB Acquired: 5/28/2015 12:26:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00084	-.00094	-.00291	.02107	-.00037	.00007	-.00526	.00535	.00025	-.00012	.00012	-.00023	.00030
Stddev	.00029	.00017	.00318	.00024	.00015	.00011	.00017	.00045	.00004	.00035	.00051	.00003	.00242
%RSD	34.377	17.952	108.95	1.1190	41.562	153.94	3.2846	8.4862	17.114	301.52	426.32	11.203	811.87
#1	.00105	-.00082	-.00067	.02090	-.00026	.00015	-.00513	.00503	.00022	-.00037	.00048	-.00025	.00201
#2	.00064	-.00106	-.00516	.02123	-.00048	-.00001	-.00538	.00567	.00028	.00013	-.00024	-.00022	-.00142

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.14813	-.00009	.00537	.00004	.00030	.17035	.00018	-.00019	-.00077	.01212	.00350	-.00098	.01162
Stddev	.02742	.00059	.00103	.00002	.00021	.00142	.00028	.00401	.00118	.00307	.00444	.00533	.00438
%RSD	18.509	665.57	19.111	41.017	72.075	.83607	159.23	2112.1	153.37	25.321	126.74	545.13	37.744
#1	.12874	.00033	.00464	.00003	.00014	.17135	.00037	.00264	.00006	.00995	.00664	-.00475	.00852
#2	.16751	-.00051	.00609	.00005	.00045	.16934	-.00002	-.00302	-.00160	.01429	.00036	.00279	.01472

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.02486	-.00044	.00003	.00100	.00002	-.00234	-.03354	-.00044	.00053	-.00071
Stddev	.00938	.00001	.00014	.00073	.00019	.00063	.00057	.00006	.00054	.00183
%RSD	37.744	1.2970	546.90	72.746	820.56	27.003	1.7046	12.809	100.96	257.68
#1	.01822	-.00045	-.00008	.00152	.00016	-.00190	-.03394	-.00040	.00091	-.00201
#2	.03149	-.00044	.00013	.00049	-.00011	-.00279	-.03313	-.00048	.00015	.00058

Check ? High Limit Low Limit	Chk Pass									
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3124.0	53538.	5295.6
Stddev	14.3	96.	75.6
%RSD	.45891	.17890	1.4285
#1	3113.9	53605.	5242.1
#2	3134.2	53470.	5349.1

Sample Name: CCVL3296658 Acquired: 5/28/2015 12:29:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00993	.10737	F .01004	.12299	.00912	.00095	.10554	.19942	.00536	.01056	.00990	.01503
Stddev	.00018	.00063	.00078	.00090	.00012	.00011	.00169	.00143	.00022	.00029	.00031	.00075
%RSD	1.7878	.58912	7.8130	.73515	1.2943	11.725	1.6015	.71597	4.1258	2.6992	3.0923	5.0173
#1	.00981	.10782	.01060	.12235	.00904	.00102	.10435	.20043	.00521	.01036	.01012	.01450
#2	.01006	.10693	.00949	.12363	.00921	.00087	.10674	.19841	.00552	.01076	.00969	.01557

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01500 -30.000%	Chk Pass								
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09728	3.1165	.01147	.21123	.01097	.02006	1.1949	.04224	3.0106	.00717	.00955	.01057
Stddev	.00087	.0374	.00000	.00523	.00017	.00010	.0147	.00045	.0007	.00179	.00333	.00104
%RSD	.89894	1.2018	.00346	2.4768	1.5557	.50975	1.2286	1.0635	.02275	24.984	34.878	9.8022
#1	.09790	3.0900	.01147	.20753	.01109	.01999	1.2053	.04256	3.0101	.00590	.01190	.01131
#2	.09666	3.1430	.01147	.21493	.01085	.02014	1.1845	.04192	3.0111	.00843	.00719	.00984

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .02184	.50801	1.0871	.10467	.00984	.01538	.01017	.01805	F .03703	.01013	.02341	.01233
Stddev	.00612	.00836	.0179	.00021	.00014	.00217	.00099	.00169	.05053	.00015	.00053	.00053
%RSD	28.034	1.6465	1.6465	.19647	1.4412	14.086	9.7063	9.3728	136.45	1.5208	2.2507	4.3258
#1	.01751	.51392	1.0998	.10453	.00974	.01692	.01087	.01686	.00130	.01003	.02378	.01271
#2	.02617	.50209	1.0745	.10482	.00994	.01385	.00948	.01925	.07276	.01024	.02304	.01196

Check ? Value Range	Chk Fail .01500 30.000%	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass						
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3135.9	53020.	5302.6
Stddev	19.4	60.	15.4
%RSD			
#1	3122.2		5291.7
#2	3149.6		5313.5

Sample Name: 280-69534-B-1-A Acquired: 5/28/2015 12:31:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00077	.00458	.00337	.02697	.12028	-.00004	-.00215	18.816	-.00010
Stddev	.00048	.00035	.00130	.00059	.00188	.00003	.00656	.285	.00010
%RSD	62.466	7.6336	38.709	2.1904	1.5593	78.048	305.40	1.5153	104.49
#1	.00043	.00483	.00245	.02656	.11895	-.00002	-.00679	18.614	-.00002
#2	.00112	.00434	.00429	.02739	.12161	-.00007	.00249	19.018	-.00017
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00055	.00010	-.00033	.01752	.90703	.00230	3.9785	.07914	-.00027
Stddev	.00007	.00006	.00005	.00230	.08116	.00083	.0418	.00083	.00003
%RSD	12.461	57.512	16.527	13.151	8.9476	36.193	1.0515	1.0539	12.946
#1	-.00050	.00014	-.00037	.01589	.84964	.00289	3.9489	.07855	-.00029
#2	-.00059	.00006	-.00029	.01915	.96442	.00171	4.0080	.07973	-.00024
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.551	.00155	.04857	.00036	.74365	.00125	.00181	11.002	23.544
Stddev	.373	.00043	.00147	.00098	.00367	.00169	.00111	.207	.442
%RSD	1.4033	27.365	3.0267	276.47	.49341	134.85	61.206	1.8773	1.8773
#1	26.287	.00185	.04753	.00105	.74624	.00006	.00259	10.856	23.231
#2	26.814	.00125	.04961	-.00034	.74105	.00245	.00103	11.148	23.856
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.24730	.00147	.00023	-.00159	-.03759	-.00047	.00087	-.00215
Stddev	.00284	.00396	.00065	.00018	.00146	.03798	.00059	.00007	.00176
%RSD	495.78	1.6002	44.358	76.932	91.982	101.02	126.41	8.4596	81.941
#1	.00143	.24450	.00194	.00035	-.00262	-.01074	-.00005	.00092	-.00090
#2	-.00258	.25010	.00101	.00010	-.00055	-.06445	-.00089	.00082	-.00339
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3049.5	52110.	5344.8						
Stddev	.4	616.	86.1						
%RSD	.01202	1.1827	1.6102						
#1	3049.7	52546.	5405.6						
#2	3049.2	51674.	5283.9						

Sample Name: 280-69534-B-2-A Acquired: 5/28/2015 12:34:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00484	.00016	.02854	.11431	-.00012	-.00669	17.837	.00024
Stddev	.00045	.00026	.00380	.00035	.00114	.00008	.00216	.084	.00015
%RSD	83.983	5.4484	2417.7	1.2203	.99748	71.484	32.234	.46834	60.139
#1	.00022	.00465	.00284	.02879	.11351	-.00017	-.00821	17.778	.00014
#2	.00086	.00502	-.00253	.02830	.11512	-.00006	-.00516	17.896	.00034
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.00044	-.00025	.00674	1.5024	.00418	3.2984	.03837	.00085
Stddev	.00008	.00023	.00037	.00012	.0172	.00123	.0051	.00033	.00012
%RSD	68.311	52.395	146.48	1.8089	1.1448	29.320	.15464	.85017	14.619
#1	-.00006	.00060	.00001	.00682	1.4903	.00331	3.2948	.03814	.00076
#2	-.00018	.00028	-.00051	.00665	1.5146	.00504	3.3020	.03860	.00094
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.076	.00181	.11340	-.00079	.87758	.00189	.00187	11.321	24.226
Stddev	.079	.00009	.00372	.00125	.00947	.00223	.00831	.179	.383
%RSD	.25544	4.8606	3.2838	158.71	1.0792	118.05	445.12	1.5824	1.5824
#1	31.020	.00175	.11077	-.00167	.87088	.00031	-.00401	11.194	23.955
#2	31.132	.00188	.11604	.00010	.88428	.00346	.00774	11.447	24.497
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.24059	-.00159	-.00088	-.00142	-.02604	.00093	.00186	-.00152
Stddev	.00006	.00028	.00057	.00006	.00281	.00520	.00044	.00009	.00095
%RSD	18.705	.11775	35.609	6.3538	198.20	19.956	47.015	4.8718	62.249
#1	.00028	.24039	-.00200	-.00092	.00057	-.02237	.00062	.00180	-.00085
#2	.00036	.24079	-.00119	-.00084	-.00340	-.02972	.00125	.00193	-.00219
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3069.4	51599.	5140.3						
Stddev	2.4	68.	3.6						
%RSD	.07709	.13183	.07094						
#1	3071.0	51550.	5142.9						
#2	3067.7	51647.	5137.7						

Sample Name: 280-69534-B-3-A Acquired: 5/28/2015 12:36:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00118	.01916	.00513	.02402	.08944	-.00011	-.00461	19.554	.00050
#2	.00059	.01951	-.00026	.02401	.09035	-.00004	-.00096	19.669	.00040
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00049	.00012	-.00057	.01465	1.0460	.00087	5.3432	.00837	.00001
#2	-.00051	.00060	.00051	.01322	1.0526	.00164	5.2566	.00830	-.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	25.752	.00158	.06309	.00094	1.0336	.00165	.00325	12.881	27.566
#2	26.141	.00190	.06869	.00031	1.0260	-.00033	.00371	12.996	27.811
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00141	.23434	-.00082	-.00007	-.00335	-.03680	.00028	.00077	.00155
#2	-.00005	.23543	.00121	-.00010	-.00213	-.03713	-.00034	.00112	-.00019
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3096.8	52166.	5256.9						
#2	3135.4	52225.	5287.7						

Sample Name: 280-69534-B-4-A Acquired: 5/28/2015 12:39:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00061	.00966	-.00568	.02175	.10308	-.00001	-.00224	15.490	.00032
#2	.00037	.00957	.00141	.02109	.10337	.00008	-.00446	15.497	.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00055	-.00010	.00005	.06288	.79892	.00097	2.9840	.18878	.00101
#2	-.00045	.00004	.00061	.06167	.85102	.00075	3.0233	.18873	-.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	26.831	.00131	.05849	-.00022	.67830	.00285	.00392	10.910	23.348
#2	26.704	.00156	.05649	-.00024	.66756	.00172	.00195	10.924	23.377
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00050	.20425	-.00225	.00048	-.00056	-.06045	-.00050	.00136	.00032
#2	.00004	.20391	-.00057	.00013	-.00117	-.01640	-.00061	.00186	.00201
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3259.1	54967.	5814.2						
#2	3237.6	55299.	5739.3						

Sample Name: 280-69556-F-1-A Acquired: 5/28/2015 12:42:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.05344	.00049	.01928	.00582	.00006	.00508	10.592	.00014
Stddev	.00070	.00012	.00356	.00044	.00022	.00008	.00163	.061	.00014
%RSD	595.43	.21922	725.23	2.2808	3.8195	131.56	32.063	.57731	93.417
#1	.00038	.05353	-.00202	.01897	.00566	.00000	-.00624	10.635	.00005
#2	-.00061	.05336	.00300	.01959	.00598	.00011	-.00393	10.549	.00024
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00251	.00011	.00005	.39844	.73560	.00203	6.4762	1.5781	-.00084
Stddev	.00013	.00027	.00019	.00069	.00181	.00065	.0025	.0017	.00007
%RSD	5.3224	238.22	404.70	.17226	.24671	31.988	.03796	.10681	7.9571
#1	.00261	.00031	.00018	.39893	.73688	.00248	6.4745	1.5793	-.00089
#2	.00242	-.00008	-.00009	.39796	.73431	.00157	6.4779	1.5769	-.00080
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5819	.00343	.06783	-.00126	1.5159	-.00117	.00782	12.907	27.620
Stddev	.0058	.00015	.00338	.00076	.0266	.00185	.00183	.043	.093
%RSD	.12711	4.2464	4.9844	60.349	1.7549	158.55	23.423	.33623	.33623
#1	4.5861	.00333	.07022	-.00180	1.5347	-.00248	.00652	12.876	27.555
#2	4.5778	.00354	.06544	-.00072	1.4971	.00014	.00911	12.937	27.686
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00089	.07937	.00102	.00269	-.00073	-.01510	.00255	.00252	.00051
Stddev	.00044	.00010	.00167	.00031	.00071	.00992	.00016	.00034	.00111
%RSD	49.616	.13096	163.49	11.426	97.893	65.723	6.3669	13.553	216.69
#1	.00058	.07945	.00220	.00290	-.00022	-.02211	.00267	.00228	-.00027
#2	.00120	.07930	-.00016	.00247	-.00124	-.00808	.00244	.00276	.00130
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3250.0	55600.	5623.7						
Stddev	21.8	16.	47.6						
%RSD	.67108	.02868	.84680						
#1	3265.4	55589.	5590.0						
#2	3234.6	55611.	5657.4						

Sample Name: 280-69556-F-2-A Acquired: 5/28/2015 12:44:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00062	As1890 ppm .00269	B_2089 ppm .00345	Ba4554 ppm .06862	Be3130 ppm .01064	Bi2230 ppm .00008	Ca3179 ppm .00111	Cd2288 ppm .20415
#1	-.00091	.00283	-.00357	.06890	.01033	.00001	-.00002	20.486	.00010
#2	-.00033	.00256	-.00333	.06833	.01095	-.00016	-.00220	20.344	.00053
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00004	Cu3247 ppm .00034	Fe2599 ppm .00044	K_7664 ppm .12571	Li6707 ppm 3.1209	Mg2790 ppm .00272	Mn2576 ppm 6.6519	Mo2020 ppm 2.6925
#1	-.00026	.00047	.00019	.12451	3.1321	.00317	6.5521	2.6880	-.00078
#2	.00019	.00021	.00070	.12691	3.1097	.00228	6.7518	2.6969	-.00081
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 5.8253	P_1782 ppm .00265	Pb2203 ppm .09410	S_1820 ppm -.00024	Sb2068 ppm 1.4073	Se1960 ppm .00024	Si2881 ppm .00603	SiO2 ppm 14.661
#1	5.8427	.00285	.09348	-.00032	1.4011	.00210	.00775	14.700	31.458
#2	5.8078	.00246	.09472	-.00017	1.4135	-.00161	.00431	14.622	31.291
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00008	Th2837 ppm .24273	Ti3349 ppm -.00092	Tl1908 ppm 190.856 {477}	U_3701 ppm -.00325	V_2924 ppm .00398	Zn2062 ppm -.00024	Zr3391 ppm .00372
#1	.00073	.24380	-.00172	-.00013	-.00407	.00674	.00026	.00378	.00135
#2	-.00057	.24166	-.00012	.00009	-.00244	.00123	-.00073	.00366	-.00073
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3210.7	Y_3774 Cts/S 54358.	377.433 {89}					
#1	3209.4	54650.	5577.9						
#2	3212.0	54066.	5614.9						

Sample Name: 280-69618-G-1-A Acquired: 5/28/2015 12:47:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278890 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00069	.00136	.00944	.09655	.00423	-.00009	-.00215	20.454	.00013
#2	.00074	.00036	.00894	.09673	.00414	-.00005	-.00563	20.215	.00032
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00001	.00035	-.00016	.51188	1.0235	-.00030	11.146	1.8234	-.00042
#2	-.00023	.00046	-.00056	.50875	1.0079	.00231	11.160	1.8259	-.00054
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	11.519	.00299	.36345	-.00181	4.0044	.00188	.00496	22.260	47.636
#2	11.570	.00217	.36095	-.00249	4.0042	-.00315	.00395	22.363	47.858
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00026	.12389	-.00052	-.00053	-.00111	-.06860	-.00107	.00066	-.00018
#2	.00031	.12221	-.00337	-.00006	-.00570	-.01424	-.00007	.00020	.00098
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3119.0	52949.	5485.8						
#2	3127.1	52856.	5521.5						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 12:49:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00504	49.572	-0.00023	.01138	.00082	.00004	1.0201	.02991	-0.00029	-0.00071	.00036
Stddev	.00052	.437	.00208	.00002	.00014	.00015	.0086	.00136	.00002	.00035	.00012
%RSD	10.380	.88250	889.27	.20753	17.669	396.71	.84712	4.5558	7.9968	49.174	33.386
#1	-.00541	49.263	.00123	.01137	.00072	-.00007	1.0262	.03088	-.00030	-.00046	.00044
#2	-.00467	49.882	-.00170	.01140	.00092	.00014	1.0140	.02895	-.00027	-.00096	.00027
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00133	49.145	.14783	.00174	.05135	-.00137	-.00055	246.18	.00214	.00244	.00063
Stddev	.00129	.093	.00395	.00044	.00601	.00004	.00065	1.89	.00025	.00054	.00158
%RSD	96.830	.18956	2.6743	25.333	11.701	2.6096	117.32	.76840	11.629	22.222	250.45
#1	.00042	49.079	.14503	.00143	.05560	-.00139	-.00009	244.84	.00196	.00205	-.00049
#2	.00224	49.210	.15062	.00205	.04711	-.00134	-.00101	247.52	.00232	.00282	.00175
Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9606	-.00817	.01360	-.00719	-.01539	-.00239	.00025	5.0480	-.01283	.00310	W 10.544
Stddev	.0281	.00163	.00547	.00791	.01692	.00036	.00004	.0045	.00030	.00026	.004
%RSD	.56714	19.976	40.242	109.89	109.89	15.039	17.009	.08983	2.3756	8.3002	.04156
#1	4.9805	-.00932	.00973	-.01278	-.02736	-.00264	.00022	5.0448	-.01261	.00292	10.547
#2	4.9407	-.00701	.01747	-.00160	-.00343	-.00213	.00027	5.0512	-.01304	.00328	10.541
Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value Range											10.000 5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00245	-.00042	-.13916								
Stddev	.00090	.00108	.00056								
%RSD	36.667	255.01	.40017								
#1	.00309	-.00119	-.13877								
#2	.00182	.00034	-.13955								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3061.7	51088.	5268.3								
Stddev	6.1	179.	37.1								
%RSD	.19984	.34961	.70378								
#1	3057.3	50961.	5294.5								
#2	3066.0	51214.	5242.1								

Sample Name: CCV-3290307 Acquired: 5/28/2015 12:52:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48710	.52049	.99545	.52524	.47030	.46853	-.00058	4.7444	.51246	.50318	.47461	.48690	2.3888
Stddev	.00194	.00169	.00149	.00599	.00724	.00668	.00179	.0799	.00120	.00281	.00237	.00046	.0340
%RSD	.39725	.32434	.14966	1.1405	1.5384	1.4264	311.45	1.6851	.23358	.55777	.49902	.09346	1.4240
#1	.48847	.51929	.99440	.52100	.46518	.46381	-.00184	4.6878	.51161	.50120	.47294	.48658	2.3648
#2	.48574	.52168	.99651	.52947	.47541	.47326	.00069	4.8009	.51331	.50517	.47629	.48723	2.4129
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.477	.96432	19.564	.50866	.49524	5.0424	.50384	1.0205	1.0119	.00020	1.0104	1.0024	4.9119
Stddev	.862	.01640	.052	.00077	.00285	.0979	.00259	.0081	.0047	.00838	.0082	.0195	.0958
%RSD	1.7783	1.7004	.26539	.15214	.57619	1.9406	.51496	.79470	.46811	4207.9	.81199	1.9481	1.9499
#1	47.867	.95273	19.601	.50921	.49322	4.9732	.50200	1.0148	1.0085	-.00573	1.0046	.98861	4.8442
#2	49.086	.97592	19.527	.50811	.49726	5.1116	.50567	1.0263	1.0152	.00612	1.0162	1.0162	4.9796
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.512	1.0060	.47333	-.00479	.49713	1.0336	-.03349	.51126	.50864	.47078			
Stddev	.205	.0027	.00750	.00205	.00107	.0081	.00794	.00486	.00188	.00790			
%RSD	1.9499	.27155	1.5850	42.812	.21425	.78463	23.726	.95094	.36924	1.6778			
#1	10.367	1.0041	.46803	-.00623	.49788	1.0279	-.03910	.51470	.50997	.46520			
#2	10.656	1.0080	.47864	-.00334	.49638	1.0394	-.02787	.50782	.50731	.47637			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3088.8	53070.	5249.9										
Stddev	3.7	410.	111.9										
%RSD	.12124	.77339	2.1322										
#1	3091.5	52780.	5329.0										
#2	3086.2	53360.	5170.7										

Sample Name: CCB Acquired: 5/28/2015 12:54:41 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	W .00140	- .00051	- .00289	.00956	- .00018	- .00002	- .00204	- .00182	.00008	- .00039	- .00019
Stddev	.00086	.00025	.00109	.00018	.00006	.00000	.00241	.00231	.00010	.00008	.00001
%RSD	61.553	48.244	37.711	1.8330	30.279	17.185	118.05	126.69	122.70	20.412	5.5922
#1	.00079	- .00033	- .00212	.00968	- .00022	- .00002	- .00034	- .00019	.00015	- .00045	- .00018
#2	.00201	- .00068	- .00366	.00943	- .00014	- .00003	- .00374	- .00345	.00001	- .00033	- .00019
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00100										
Low Limit	-.00100										
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00018	- .00078	.11146	.00092	- .00056	.00001	.00035	.12860	- .00005	- .00016	- .00187
Stddev	.00018	.00014	.02869	.00184	.00076	.00007	.00017	.00255	.00061	.00089	.00049
%RSD	103.48	17.337	25.743	199.53	136.87	597.38	49.147	1.9825	1210.7	572.40	25.928
#1	-.00031	- .00088	.09117	.00223	- .00110	.00006	.00047	.13040	.00038	- .00078	- .00153
#2	-.00005	- .00069	.13175	- .00038	- .00002	- .00004	.00023	.12680	- .00048	.00047	- .00222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	-.00130	.00122	F .00533	.01968	.04211	- .00095	.00002	- .00086	.00030	.00274	.00940
Stddev	.00039	.00026	.00410	.00747	.01598	.00189	.00002	.00181	.00007	.00121	.01569
%RSD	29.979	21.491	76.989	37.953	37.953	199.20	105.99	209.72	23.968	44.021	166.94
#1	-.00158	.00141	.00823	.02496	.05341	.00039	.00003	.00042	.00025	.00189	- .00170
#2	-.00103	.00104	.00243	.01440	.03081	- .00229	.00000	- .00214	.00035	.00360	.02049
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	-.00047	- .00078	.00074								
Stddev	.00041	.00037	.00106								
%RSD	88.228	47.780	141.83								
#1	-.00018	- .00052	.00000								
#2	-.00076	- .00105	.00149								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3148.9	54857.	5778.5								
Stddev	4.5	951.	6.9								
%RSD	.14385	1.7329	.11942								
#1	3145.7	55529.	5773.6								
#2	3152.1	54184.	5783.4								

Sample Name: CCVL3296658 Acquired: 5/28/2015 12:56:58 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00071	F -.00120	F -.00124	F .00862	F .00237	F .00018	F -.00097	F .04789	F .00013	F -.00022	F .00011
Stddev	.00052	.00040	.00336	.00039	.00313	.00029	.00107	.06644	.00011	.00003	.00013
%RSD	73.126	33.060	271.76	4.5403	132.05	159.51	110.03	138.72	82.068	12.081	112.51
#1	.00034	-.00148	-.00362	.00890	.00458	.00039	-.00173	.09487	.00021	-.00020	.00002
#2	.00108	-.00092	.00114	.00834	.00016	-.00002	-.00022	.00092	.00006	-.00024	.00020
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F .00002	F .02219	F .83049	F .00463	F .00204	F -.00007	F -.00026	F .36497	F .00022	F -.00300	F -.00110
Stddev	.00025	.03051	1.0278	.00516	.00652	.00002	.00028	.34735	.00001	.00206	.00072
%RSD	1101.8	137.46	123.76	111.50	319.42	35.187	110.40	95.171	3.8828	68.710	65.449
#1	-.00016	.04377	1.5573	.00828	-.00257	-.00009	-.00045	.61058	.00021	-.00154	-.00059
#2	.00020	.00062	.10372	.00098	.00665	-.00005	-.00006	.11936	.00023	-.00446	-.00161
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.00542	F .00193	F .00148	F .12633	F .27035	F -.00059	F .00242	F -.00131	F -.00005	F .00093	F .01342
Stddev	.00127	.00117	.00124	.16553	.35423	.00087	.00343	.00054	.00002	.00089	.01354
%RSD	23.514	60.680	83.995	131.03	131.03	147.17	141.56	41.566	38.756	95.865	100.88
#1	.00452	.00110	.00060	.24338	.52084	-.00121	.00485	-.00169	-.00003	.00030	.00385
#2	.00632	.00275	.00236	.00929	.01987	.00002	.00000	-.00092	-.00006	.00156	.02299
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F .00012	F -.00014	F .00413								
Stddev	.00010	.00068	.00562								
%RSD	83.018	483.05	135.91								
#1	.00005	.00034	.00810								
#2	.00019	-.00062	.00016								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243	Y_3600	Y_3774								
Avg	3253.5	55916.	5601.5								
Stddev	2.2	782.	21.4								
%RSD	.06734	1.3985	.38291								
#1	3255.0	56469.	5616.7								
#2	3251.9	55363.	5586.3								

Sample Name: MB 280-278895/1-A Acquired: 5/28/2015 12:59:14 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	-.00101	.00211	.00825	-.00004	-.00003	-.00127	.01443	-.00006
Stddev	.00059	.00046	.00176	.00094	.00002	.00010	.00095	.00146	.00024
%RSD	410.07	44.988	83.474	11.422	39.914	336.67	74.816	10.098	373.52
#1	.00056	-.00134	.00335	.00891	-.00003	.00004	-.00060	.01340	-.00023
#2	-.00027	-.00069	.00086	.00758	-.00005	-.00010	-.00194	.01546	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	-.00015	-.00027	.00630	.06063	.00168	.00563	.00000	-.00001
Stddev	.00032	.00009	.00055	.00026	.03534	.00132	.00001	.00003	.00046
%RSD	162.05	57.872	205.29	4.1730	58.286	78.134	.20333	698.64	6896.0
#1	-.00042	-.00009	-.00065	.00612	.03564	.00262	.00564	.00003	.00032
#2	.00003	-.00021	.00012	.00649	.08562	.00075	.00562	-.00002	-.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11626	.00034	-.00424	F -.00311	-.00201	.00090	-.00202	.03590	.07682
Stddev	.00906	.00010	.00119	.00072	.00653	.00116	.00039	.00286	.00613
%RSD	7.7954	30.633	28.152	23.172	324.07	128.02	19.231	7.9790	7.9790
#1	.12267	.00026	-.00339	-.00260	.00260	.00172	-.00175	.03387	.07248
#2	.10985	.00041	-.00508	-.00362	-.00663	.00009	-.00230	.03792	.08115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail .00900 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00001	.00015	.00024	.00113	-.01214	-.00057	.00014	.00004
Stddev	.00044	.00002	.00151	.00019	.00036	.00229	.00016	.00086	.00206
%RSD	166.56	197.28	1027.8	78.505	31.425	18.885	29.094	611.17	4649.6
#1	.00058	.00003	-.00092	.00011	.00138	-.01377	-.00045	-.00047	.00150
#2	-.00005	.00000	.00121	.00038	.00088	-.01052	-.00068	.00075	-.00141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3171.5	55177.	5655.0						
Stddev	5.5	1196.	50.1						
%RSD	.17365	2.1675	.88517						
#1	3167.6	56023.	5619.6						
#2	3175.4	54332.	5690.4						

Sample Name: 280-69663-B-1-A Acquired: 5/28/2015 13:01:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00052	As1890 ppm -.00096	B_2089 ppm -.00162	Ba4554 ppm .00884	Be3130 ppm .04975	Bi2230 ppm .00000	Ca3179 ppm -.00195	Cd2288 ppm 37.821
#1	.00095	-.00088	.00083	.00869	.04874	-.00001	-.00124	37.237	.00005
#2	.00008	-.00103	-.00407	.00899	.05077	.00002	-.00266	38.405	.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00030	Cu3247 ppm .00035	Fe2599 ppm .09912	K_7664 ppm 1.1527	Li6707 ppm .00396	Mg2790 ppm .20561	Mn2576 ppm .00005	Mo2020 ppm -.00025
#1	-.00002	-.00008	.00046	.09863	1.1912	.00431	.41226	.00002	-.00051
#2	-.00059	.00002	.00024	.09961	1.1142	.00361	-.00104	.00008	.00000
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 23.489	P_1782 ppm -.00034	Pb2203 ppm -.00296	S_1820 ppm .00419	Sb2068 ppm .00159	Se1960 ppm .00371	Si2881 ppm 13.622	SiO2 ppm 29.150
#1	23.571	-.00034	-.00466	-.00672	.00427	.00205	.00207	13.635	29.178
#2	23.407	-.00035	-.00126	-.00415	.00411	.00114	.00536	13.608	29.122
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00014	Th2837 ppm .54279	Ti3349 ppm -.00126	Tl1908 ppm .00033	U_3701 ppm .00077	V_2924 ppm .00176	Zn2062 ppm .00012	Zr3391 ppm -.00016
#1	.00114	.53307	-.00131	.00027	-.00041	-.00961	.00116	-.00010	-.00036
#2	-.00142	.55250	-.00121	.00039	.00195	.01313	-.00091	-.00023	.00166
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3244.0	Y_3774 Cts/S 55283.	377.433 {89}					
#1	3228.1	55257.	5450.5						
#2	3259.9	55309.	5465.4						

Sample Name: 280-69663-B-1-A SD@5 Acquired: 5/28/2015 13:04:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	.00316	-.00358	.01281	.01017	-.00010	-.00370	7.6199	.00016
Stddev	.00067	.00028	.00310	.00035	.00040	.00005	.00045	.1423	.00033
%RSD	91.285	8.8650	86.596	2.7227	3.9619	48.217	12.235	1.8669	203.78
#1	.00026	.00296	-.00578	.01306	.00988	-.00014	-.00402	7.5193	.00039
#2	.00120	.00336	-.00139	.01257	.01045	-.00007	-.00338	7.7205	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	.00180	.00011	.01345	.32840	.00245	1.0213	.00027	-.00007
Stddev	.00023	.00058	.00006	.00233	.02456	.00082	.0158	.00001	.00025
%RSD	44.621	32.138	55.157	17.307	7.4787	33.646	1.5482	4.2670	386.80
#1	-.00067	.00220	.00006	.01181	.34576	.00187	1.0324	.00028	-.00024
#2	-.00035	.00139	.00015	.01510	.31103	.00303	1.0101	.00026	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4457	.00080	.01050	.00048	.78844	.00142	.00021	2.6932	5.7635
Stddev	.0738	.00057	.00415	.00021	.01420	.00047	.00531	.0564	.1207
%RSD	1.6598	70.769	39.542	43.648	1.8007	33.169	2526.6	2.0937	2.0937
#1	4.3935	.00120	.01343	.00033	.79848	.00109	.00396	2.6534	5.6782
#2	4.4978	.00040	.00756	.00063	.77840	.00175	-.00354	2.7331	5.8489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.11068	.00140	.00045	.00007	W -.05916	.00346	.00074	-.00065
Stddev	.00033	.00055	.00075	.00028	.00398	.01925	.00016	.00060	.00062
%RSD	146.96	.49709	53.483	61.471	5456.2	32.537	4.6198	81.470	96.113
#1	.00045	.11029	.00087	.00026	-.00274	-.04555	.00335	.00116	-.00108
#2	-.00001	.11107	.00192	.00065	.00289	-.07278	.00357	.00031	-.00021
Check ?	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3203.4	54359.	5481.4						
Stddev	8.5	35.	80.7						
%RSD	.26520	.06528	1.4720						
#1	3197.4	54384.	5538.5						
#2	3209.4	54334.	5424.4						

Sample Name: 280-69663-B-1-B MS Acquired: 5/28/2015 13:06:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04437	1.9667	.99102	1.0630	1.9663	.04733	2.0001	84.376	.10260
#2	.04621	1.9722	1.0051	1.0687	1.9310	.04705	2.0037	82.794	.10266
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48338	.19132	.24564	.96235	50.482	.98558	53.382	.50487	1.0233
#2	.48367	.19262	.24575	.97303	49.624	.96635	53.349	.50321	1.0270
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	74.059	.48469	10.513	.48682	6.0025	.51109	2.0235	22.839	48.875
#2	73.088	.48458	10.553	.48750	6.0485	.51475	2.0244	22.915	49.038
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9887	1.5052	1.0097	1.0020	1.9476	2.0483	.53610	.50368	.44269
#2	1.9907	1.4754	1.0054	.99874	1.9361	2.0897	.53306	.49977	.44294
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3052.3	51355.	5318.8						
#2	3044.1	51683.	5422.7						

Sample Name: 280-69663-B-1-C MSD Acquired: 5/28/2015 13:09:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0281	As1890 ppm 1.0237	B_2089 ppm 1.0970	Ba4554 ppm 1.9932	Be3130 ppm .04782	Bi2230 ppm F 2.0514	Ca3179 ppm 86.451	Cd2288 ppm .10504
#1	.04751	2.0252	1.0193	1.0937	2.0061	.04809	2.0481	86.847	.10542
#2	.04833	2.0309	1.0281	1.1004	1.9804	.04754	2.0548	86.055	.10465
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .19522	Cu3247 ppm .25305	Fe2599 ppm .99436	K_7664 ppm 51.259	Li6707 ppm .99546	Mg2790 ppm 55.061	Mn2576 ppm .51818	Mo2020 ppm 1.0537
#1	.49574	.19489	.25297	.99194	51.475	1.0014	55.085	.51827	1.0535
#2	.49802	.19556	.25313	.99678	51.042	.98953	55.036	.51808	1.0540
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 76.037	P_1782 ppm .49674	Pb2203 ppm W 10.848	S_1820 ppm .50090	Sb2068 ppm 6.2792	Se1960 ppm .53175	Si2881 ppm 2.0789	SiO2 ppm 23.772
#1	75.664	.49696	10.817	.49927	6.2529	.53069	2.0804	23.694	50.705
#2	76.410	.49652	10.879	.50254	6.3055	.53281	2.0773	23.851	51.040
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0504	Th2837 ppm 1.5390	Ti3349 ppm 1.0379	Tl1908 ppm 1.0318	U_3701 ppm 1.9995	V_2924 ppm 2.1289	Zn2062 ppm .54995	Zr3391 ppm .51829
#1	2.0516	1.5489	1.0365	1.0317	2.0032	2.1002	.55129	.51807	.45140
#2	2.0492	1.5291	1.0394	1.0318	1.9957	2.1577	.54861	.51851	.45511
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3004.5	Y_3774 Cts/S 50986.	377.433 {89}					
#1	2991.2	50911.	5369.4						
#2	3017.9	51061.	5360.6						

Sample Name: 280-69663-B-2-A Acquired: 5/28/2015 13:11:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.08204	-.00156	.03534	.04628	.00000	-.00237	26.603	.00030
Stddev	.00040	.00045	.00365	.00065	.00003	.00002	.00364	.079	.00013
%RSD	62.506	.54399	233.92	1.8289	.05716	1073.6	153.90	.29599	44.301
#1	.00091	.08173	-.00414	.03488	.04630	.00002	-.00494	26.658	.00021
#2	.00035	.08236	.00102	.03580	.04626	-.00001	.00021	26.547	.00040
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.01384	.00027	.10660	.94185	.00402	3.4290	.00593	.00023
Stddev	.00079	.00031	.00092	.00177	.05228	.00084	.0201	.00005	.00021
%RSD	153.40	2.2475	336.23	1.6607	5.5510	20.906	.58503	.81952	89.605
#1	-.00108	.01362	.00092	.10785	.97882	.00462	3.4432	.00589	.00038
#2	.00004	.01406	-.00038	.10535	.90488	.00343	3.4148	.00596	.00008
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.568	.00244	.03853	-.00042	4.7151	-.00081	.00562	13.721	29.363
Stddev	.062	.00032	.00537	.00033	.0290	.00281	.00475	.023	.048
%RSD	.30290	13.121	13.943	78.405	.61559	345.80	84.364	.16499	.16499
#1	20.612	.00267	.03473	-.00019	4.6946	-.00280	.00227	13.705	29.328
#2	20.524	.00222	.04233	-.00066	4.7356	.00118	.00898	13.737	29.397
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00126	.35327	-.00150	.00560	-.00096	-.03663	.02483	.00201	-.00121
Stddev	.00044	.00191	.00151	.00024	.00011	.02291	.00071	.00102	.00037
%RSD	34.515	.54079	101.19	4.3053	11.596	62.560	2.8577	50.863	30.910
#1	.00095	.35463	-.00257	.00543	-.00088	-.02042	.02433	.00274	-.00147
#2	.00157	.35192	-.00043	.00577	-.00104	-.05283	.02533	.00129	-.00094
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3082.9	53105.	5480.9						
Stddev	8.6	83.	43.8						
%RSD	.27782	.15712	.79994						
#1	3076.9	53046.	5511.9						
#2	3089.0	53164.	5449.9						

Sample Name: 280-69663-B-3-A Acquired: 5/28/2015 13:13:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00050	.08128	.00579	.04289	.04027	.00006	-.00471	29.223	-.00021
#2	.00042	.08027	.00065	.03985	.04020	-.00019	-.00214	28.661	.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00079	.01215	.00140	.11118	1.3676	.00278	3.5726	.00716	.00051
#2	-.00058	.01227	.00156	.11079	1.3483	.00444	3.6096	.00723	-.00021
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	23.772	.00238	.05446	-.00040	3.8412	.00091	.01171	13.561	29.020
#2	23.882	.00246	.05166	-.00061	3.8233	.00306	.00712	13.556	29.010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00012	.41937	.00157	.00497	-.00351	-.01608	.02834	.00298	-.00247
#2	.00034	.41078	-.00024	.00479	-.00521	-.00539	.02861	.00411	-.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3066.7	51807.	5168.9						
#2	3081.7	51970.	5329.2						

Sample Name: 280-69665-D-1-E Acquired: 5/28/2015 13:16:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00058	.00741	-.00609	.01264	.00207	.00003	-.00511	9.5848	-.00010
#2	.00077	.00762	-.00741	.01188	.00224	-.00005	-.00332	9.5633	.00035
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00052	.00861	.00038	.01224	1.0181	.00607	6.9750	.00061	-.00016
#2	-.00047	.00892	.00011	.01718	.96422	.00581	6.9557	.00065	-.00039
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	6.6193	.00317	.04072	W -.00355	.61828	-.00029	-.00132	18.609	39.824
#2	.0214	.00016	.00024	.00033	.02100	.00224	.00537	.176	.377
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00082	.04797	.00073	.00072	.00011	-.05532	.00197	.00541	.00056
#2	.00121	.04826	.00190	.00031	-.00086	-.06525	.00257	.00561	.00096
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3164.7	53378.	5395.9						
#2	3100.2	53554.	5418.7						

Sample Name: 280-69665-D-2-A Acquired: 5/28/2015 13:19:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	.00116	-.00639	.03208	.00273	-.00008	-.00264	11.515	.00013
Stddev	.00002	.00021	.00287	.00002	.00042	.00006	.00112	.185	.00018
%RSD	2.5864	17.921	44.867	.06819	15.355	73.984	42.194	1.6092	136.42
#1	.00076	.00131	-.00436	.03206	.00302	-.00012	-.00186	11.384	.00000
#2	.00079	.00101	-.00841	.03209	.00243	-.00004	-.00343	11.646	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00073	-.00002	.00021	.02594	.70844	.00159	6.3028	.57437	.00008
Stddev	.00010	.00003	.00002	.00121	.00408	.00195	.0435	.00220	.00034
%RSD	13.805	152.96	11.163	4.6538	.57594	122.95	.68978	.38318	417.61
#1	-.00066	-.00004	.00023	.02679	.71133	.00021	6.3336	.57281	.00032
#2	-.00080	.00000	.00019	.02508	.70556	.00297	6.2721	.57593	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.4093	.00221	.03129	W -.00328	1.6091	.00344	.00163	14.855	31.789
Stddev	.0748	.00036	.00106	.00011	.0026	.00120	.00289	.279	.597
%RSD	1.1675	16.077	3.3871	3.4555	.15865	34.939	177.16	1.8785	1.8785
#1	6.3563	.00196	.03204	-.00336	1.6109	.00259	-.00041	14.657	31.367
#2	6.4622	.00247	.03054	-.00320	1.6073	.00429	.00368	15.052	32.211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.07193	-.00023	.00021	-.00038	-.00665	.00057	.00083	-.00007
Stddev	.00174	.00118	.00045	.00040	.00003	.01698	.00048	.00030	.00162
%RSD	214.02	1.6402	199.53	188.28	7.0240	255.21	83.281	36.665	2184.1
#1	-.00042	.07110	.00009	-.00007	-.00040	-.01866	.00091	.00104	.00107
#2	.00204	.07277	-.00055	.00050	-.00036	.00535	.00024	.00061	-.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3143.4	54413.	5218.1						
Stddev	23.4	350.	38.8						
%RSD	.74553	.64277	.74327						
#1	3160.0	54660.	5245.5						
#2	3126.8	54165.	5190.7						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 13:21:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	-.00570	49.399	-.00360	.00543	.00035	.00003	1.0375	.02893	-.00023	-.00057	.00050
Stddev	.00115	1.061	.00404	.00003	.00011	.00009	.0017	.00262	.00006	.00033	.00032
%RSD	20.119	2.1467	112.23	.51070	31.776	295.70	.16451	9.0734	26.558	58.260	64.816
#1	-.00651	48.649	-.00645	.00541	.00042	.00009	1.0363	.03078	-.00028	-.00080	.00072
#2	-.00489	50.149	-.00074	.00545	.00027	-.00003	1.0387	.02707	-.00019	-.00034	.00027
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	.00036	49.824	.11568	.00279	.05289	-.00165	-.00045	247.48	.00288	.00157	.00076
Stddev	.00002	1.206	.01135	.00040	.00526	.00003	.00017	6.22	.00024	.00141	.00071
%RSD	6.5379	2.4210	9.8108	14.500	9.9402	1.8304	37.451	2.5131	8.3840	89.887	93.215
#1	.00035	48.971	.12371	.00308	.05660	-.00167	-.00057	243.08	.00306	.00057	.00126
#2	.00038	50.677	.10766	.00251	.04917	-.00163	-.00033	251.88	.00271	.00257	.00026
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	5.0858	-.01114	.00640	-.00397	-.00849	-.00137	.00021	5.0474	-.01229	.00231	W 10.547
Stddev	.0427	.00353	.00214	.01964	.04202	.00009	.00014	.0096	.00022	.00178	.124
%RSD	.83973	31.689	33.449	494.83	494.83	6.7868	65.870	.19076	1.7902	77.256	1.1716
#1	5.0556	-.00865	.00791	-.01785	-.03821	-.00143	.00030	5.0406	-.01244	.00357	10.460
#2	5.1160	-.01364	.00489	.00992	.02122	-.00130	.00011	5.0542	-.01213	.00105	10.634
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00183	-.00109	-.13526								
Stddev	.00018	.00045	.00432								
%RSD	9.9154	41.274	3.1904								
#1	.00170	-.00077	-.13831								
#2	.00196	-.00141	-.13221								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3136.1	52158.	5404.0								
Stddev	12.6	94.	143.2								
%RSD	.40151	.18031	2.6489								
#1	3145.0	52091.	5505.2								
#2	3127.2	52224.	5302.8								

Sample Name: CCV-3290307 Acquired: 5/28/2015 13:24:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48791	.51574	.99552	.51589	.47151	.46798	-.00442	4.7259	.50911	.49883	.48280	.48724	2.3829
Stddev	.00332	.00092	.01343	.00604	.00503	.00490	.00168	.0586	.00076	.00700	.00570	.00111	.0277
%RSD	.67953	.17765	1.3494	1.1706	1.0667	1.0465	38.108	1.2408	.14915	1.4038	1.1803	.22690	1.1627
#1	.48556	.51639	1.0050	.52016	.46795	.46451	-.00561	4.6844	.50965	.50378	.48683	.48645	2.3633
#2	.49025	.51509	.98602	.51162	.47506	.47144	-.00323	4.7673	.50857	.49388	.47878	.48802	2.4024

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.315	.96518	19.447	.50646	.49205	4.9964	.49953	1.0203	1.0058	-.00150	1.0067	1.0064	4.8261
Stddev	.465	.01127	.014	.00023	.00499	.0549	.00681	.0054	.0108	.00275	.0198	.0089	.0293
%RSD	.96144	1.1681	.07019	.04634	1.0140	1.0996	1.3640	.52713	1.0739	182.97	1.9688	.88414	.60805
#1	47.987	.95721	19.437	.50629	.49558	4.9575	.50434	1.0241	1.0134	.00044	1.0207	1.0126	4.8053
#2	48.644	.97315	19.457	.50663	.48852	5.0352	.49471	1.0165	.99816	-.00345	.99268	1.0001	4.8468

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.328	.99540	.47423	-.00294	.49432	1.0246	-.00548	.51477	.51042	.46926			
Stddev	.063	.01355	.00546	.00110	.00109	.0162	.05680	.00081	.00149	.00345			
%RSD	.60805	1.3615	1.1520	37.530	.21988	1.5808	1037.2	.15722	.29258	.73442			
#1	10.283	1.0050	.47036	-.00372	.49356	1.0361	.03469	.51535	.50936	.46682			
#2	10.372	.98582	.47809	-.00216	.49509	1.0132	-.04564	.51420	.51147	.47169			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3166.8	53845.	5483.1										
Stddev	16.8	223.	40.5										
%RSD	.52926	.41494	.73883										
#1	3154.9	54003.	5511.7										
#2	3178.6	53687.	5454.4										

Sample Name: CCB Acquired: 5/28/2015 13:26:34 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00053	-.00032	-.00226	.00559	-.00012	.00002	-.00495	-.00180	.00014	-.00031	-.00003	-.00025
Stddev	.00011	.00006	.00463	.00002	.00005	.00008	.00023	.00176	.00012	.00004	.00024	.00030
%RSD	20.378	19.126	205.24	.28850	44.577	328.68	4.6115	97.374	86.006	13.976	715.84	121.08

#1	.00060	-.00028	.00102	.00560	-.00008	.00008	-.00511	-.00305	.00006	-.00028	.00014	-.00004
#2	.00045	-.00037	-.00553	.00558	-.00016	-.00003	-.00479	-.00056	.00023	-.00034	-.00021	-.00046

Check ?	Chk Pass											
High Limit												
Low Limit												

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	-.00106	.08571	.00027	-.00117	-.00004	-.00001	.10892	.00040	-.00322	-.00068	.00346	.00301
Stddev	.00141	.02083	.00242	.00512	.00004	.00056	.00383	.00104	.00193	.00037	.00385	.00196
%RSD	132.62	24.302	893.95	439.57	106.79	6520.0	3.5160	259.20	60.025	55.088	111.21	64.970

#1	-.00007	.07098	-.00144	.00246	-.00007	-.00040	.10622	-.00033	-.00185	-.00041	.00619	.00163
#2	-.00206	.10043	.00198	-.00479	-.00001	.00039	.11163	.00114	-.00458	-.00094	.00074	.00440

Check ?	Chk Pass											
High Limit												
Low Limit												

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00515	.03280	.07019	.00054	.00014	-.00046	.00000	-.00017	-.03176	-.00062	-.00049	.00013
Stddev	.00214	.00340	.00727	.00067	.00022	.00055	.0003	.00231	.02092	.00026	.00028	.00125
%RSD	41.579	10.353	10.353	124.29	155.79	119.91	25129.	1341.3	65.876	42.009	56.485	986.79

#1	.00364	.03040	.06505	.00101	.00030	-.00084	-.00021	-.00181	-.01697	-.00081	-.00030	.00101
#2	.00667	.03520	.07532	.00007	-.00001	-.00007	.00020	.00146	-.04655	-.00044	-.00069	-.00076

Check ?	Chk Fail	Chk Pass										
High Limit												
Low Limit												

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3151.2	54326.	5466.1									
Stddev	3.8	51.	5.3									
%RSD	.12023	.09469	.09701									

#1	3153.9	54363.	5469.9									
#2	3148.5	54290.	5462.4									

Sample Name: CCVL3296658 Acquired: 5/28/2015 13:28:51 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F -.00056	F -.00101	F -.00190	F .00425	F .00214	F .00023	F -.00567	F .04974	F -.00021	F -.00041	F -.00003
Stddev	.00029	.00034	.00346	.00020	.00310	.00030	.00416	.06684	.00012	.00034	.00021
%RSD	50.924	33.565	182.38	4.6887	145.02	129.49	73.366	134.36	54.402	82.067	702.34
#1	-.00076	-.00077	.00055	.00439	.00433	.00044	-.00273	.09700	-.00013	-.00066	-.00017
#2	-.00036	-.00126	-.00435	.00411	-.00005	.00002	-.00861	.00248	-.00030	-.00017	.00012
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.00500	.01000	.01000	.01000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00040	F .02658	F .78544	F .00428	F .00406	F .00006	F -.00011	F .34864	F .00013	F -.00179	F -.00008
Stddev	.00083	.03485	.98236	.00418	.00011	.00001	.00040	.34809	.00007	.00067	.00110
%RSD	204.17	131.11	125.07	97.719	2.6428	15.463	355.89	99.843	51.082	37.646	1395.9
#1	.00018	.05122	1.4801	.00723	.00413	.00006	-.00039	.59478	.00018	-.00131	-.00086
#2	-.00099	.00194	.09080	.00132	.00398	.00007	.00017	.10250	.00009	-.00226	.00070
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01500	.10000	3.0000	.01000	.20000	.01000	.02000	.10000	.04000	3.0000	.00900
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	F -.00073	F .00003	F .00772	F .13348	F .28564	F -.00017	F .00245	F .00140	F -.00002	F .00133	F -.01221
Stddev	.00326	.00417	.00038	.15872	.33966	.00076	.00354	.00050	.00016	.00110	.00732
%RSD	447.45	13006.	4.9384	118.91	118.91	437.50	144.67	35.324	768.95	82.590	59.987
#1	.00157	.00298	.00745	.24571	.52581	-.00071	.00495	.00105	.00009	.00211	-.00703
#2	-.00303	-.00292	.00799	.02125	.04547	.00036	-.00006	.00175	-.00014	.00056	-.01739
Check ?	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.01500	.50000	1.0700	.10000	.01000	.01500	.01000	.01500	.01500	.06000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00070	F -.00035	F .00446								
Stddev	.00009	.00033	.00637								
%RSD	13.333	94.373	143.05								
#1	-.00063	-.00059	.00896								
#2	-.00076	-.00012	-.00005								
Check ?	Chk Fail	Chk Fail	Chk Fail								
Value	.01000	.02000	.01500								
Range	-30.000%	-30.000%	-30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3173.5	54758.	5613.5								
Stddev	9.9	408.	6.1								
%RSD	.31063	.74594	.10808								
#1	3180.4	55047.	5617.8								
#2	3166.5	54470.	5609.2								

Sample Name: 280-69665-D-3-A Acquired: 5/28/2015 13:31:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00043	As1890 ppm -.03666	B_2089 ppm .00033	Ba4554 ppm .00428	Be3130 ppm .11177	Bi2230 ppm .00004	Ca3179 ppm -.00875	Cd2288 ppm 39.117
#1	-.00028	-.03678	-.00032	.00459	.11156	.00000	-.00881	39.216	.00031
#2	.00113	-.03653	.00098	.00397	.11197	.00007	-.00870	39.018	.00000
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00029	Cu3247 ppm -.00006	Fe2599 ppm -.00031	K_7664 ppm 24.631	Li6707 ppm 7.6419	Mg2790 ppm -.00010	Mn2576 ppm 1.6815	Mo2020 ppm .52822
#1	-.00021	.00003	-.00015	24.635	7.5598	-.00059	3.3615	1.0536	-.00033
#2	-.00036	-.00014	-.00047	24.627	7.7240	.00038	.00155	.00289	.00024
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 21.828	P_1782 ppm .00016	Pb2203 ppm -.00043	S_1820 ppm W -.00369	Sb2068 ppm .00871	Se1960 ppm -.00043	Si2881 ppm -.00075	SiO2 ppm 10.204
#1	21.802	.00007	.00305	-.00303	.01315	.00227	-.00256	10.184	21.794
#2	21.854	.00025	-.00392	-.00434	.00428	-.00314	.00107	10.223	21.877
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00000	Th2837 ppm .43160	Ti3349 ppm -.01210	Tl1908 ppm -.00012	U_3701 ppm .00180	V_2924 ppm -.04635	Zn2062 ppm -.00055	Zr3391 ppm .00078
#1	-.00012	.43022	-.00980	.00011	.00061	-.04302	-.00015	.00064	.00039
#2	.00012	.43297	-.01440	-.00036	.00299	-.04968	-.00095	.00091	.00096
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 45.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3257.2	Y_3774 Cts/S 56170.						
#1	3268.2	56560.	5274.0						
#2	3246.3	55779.	5749.2						

Sample Name: 280-69665-D-4-A Acquired: 5/28/2015 13:33:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00095	.00274	-.00175	.06177	.01104	-.00025	-.00205	29.815	.00033
#2	-.00014	.00267	-.00574	.06030	.01088	.00003	-.00463	30.116	.00025
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00010	.00071	.00062	.03066	3.7585	.00290	17.707	.07058	-.00140
#2	-.00040	.00076	.00083	.02660	3.8909	.00384	17.642	.07086	-.00102
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	13.635	.00331	.02358	-.00202	3.5374	.00413	.00466	16.753	35.851
#2	13.746	.00311	.03011	-.00009	3.5193	.00187	.00668	16.946	36.265
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00090	.22432	-.00287	.00028	-.00236	-.01896	.00114	.00270	-.00034
#2	.00123	.22615	-.00036	.00005	-.00168	-.04724	.00055	.00228	.00046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}	3157.9 4.2 .13164	53774. 195. .36337	5445.4 7.7 .14231			
#1	3155.0	53636.	5450.9						
#2	3160.9	53912.	5440.0						

Sample Name: 280-69673-B-1-A Acquired: 5/28/2015 13:36:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.01173	-.00419	.76733	.06498	-.00006	-.00345	50.049	.00025
Stddev	.00008	.00041	.00039	.00092	.00004	.00008	.00134	.006	.00016
%RSD	356.92	3.5269	9.3619	.12008	.06907	139.55	38.742	.01166	66.050
#1	-.00003	.01144	-.00447	.76668	.06501	-.00012	-.00251	50.053	.00036
#2	.00008	.01202	-.00391	.76798	.06495	.00000	-.00440	50.045	.00013
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	.00084	.00087	.01517	2.3246	.02270	38.066	.00097	.00060
Stddev	.00021	.00002	.00030	.00080	.0908	.00216	.118	.00002	.00025
%RSD	31.933	2.8365	34.929	5.2721	3.9072	9.4985	.30963	2.2947	41.167
#1	-.00051	.00082	.00065	.01460	2.2604	.02118	38.149	.00098	.00042
#2	-.00080	.00086	.00108	.01573	2.3888	.02423	37.983	.00095	.00077
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	131.66	.00366	.00577	.00238	45.741	.00141	.01084	6.6800	14.295
Stddev	1.31	.00031	.00291	.00006	.033	.00023	.00202	.0325	.070
%RSD	.99447	8.5956	50.428	2.6400	.07188	16.171	18.643	.48702	.48702
#1	132.58	.00344	.00783	.00242	45.718	.00157	.01227	6.6570	14.246
#2	130.73	.00388	.00371	.00233	45.764	.00125	.00941	6.7030	14.345
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00082	.69663	.00320	.00025	-.00665	-.03853	-.00010	.00064	-.00091
Stddev	.00195	.00052	.00136	.00031	.00103	.00024	.00060	.00017	.00127
%RSD	237.45	.07472	42.514	122.15	15.547	.62852	590.43	26.075	139.67
#1	.00220	.69626	.00224	.00047	-.00738	-.03870	.00032	.00075	-.00181
#2	-.00056	.69699	.00416	.00003	-.00592	-.03836	-.00053	.00052	-.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3061.3	52107.	5436.7						
Stddev	8.2	190.	16.4						
%RSD	.26632	.36542	.30190						
#1	3055.6	51973.	5425.1						
#2	3067.1	52242.	5448.3						

Sample Name: 280-69673-B-2-A Acquired: 5/28/2015 13:38:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00028	.02341	.00389	.42536	.00492	-.00007	-.00193	38.350	.00005
#2	.00074	.02331	.00788	.42133	.00506	.00000	-.00211	39.362	.00003
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00043	.00048	.00157	.03473	8.0156	.01356	22.297	.00648	.05432
#2	-.00058	.00049	.00036	.03665	8.2537	.01187	22.236	.00662	.05399
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	101.19	.00407	.08930	.00215	40.343	.00168	.00399	4.7652	10.198
#2	104.04	.00391	.09292	.00246	40.374	-.00095	.00195	4.8989	10.484
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00056	.22544	.00011	-.00010	-.00314	-.04068	.00065	.00041	.00292
#2	.00128	.23128	.00110	-.00037	-.00474	-.04790	.00095	.00011	-.00077
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3133.7	53058.	5599.8						
#2	3112.5	53179.	5455.5						

Sample Name: 280-69673-B-3-A Acquired: 5/28/2015 13:41:26 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278895 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.01418	-.00249	.48881	.10673	-.00011	-.00210	122.79	.00033
Stddev	.00037	.00003	.00007	.00001	.00039	.00002	.00183	.07	.00019
%RSD	220.39	.23334	2.9186	.00183	.36506	17.737	86.988	.05767	58.860
#1	-.00009	.01416	-.00255	.48882	.10701	-.00013	-.00081	122.84	.00047
#2	.00043	.01421	-.00244	.48881	.10645	-.00010	-.00339	122.74	.00019
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00117	.00071	.00883	4.9541	.01934	55.665	.03459	-.00036
Stddev	.00022	.00008	.00014	.00047	.0069	.00138	.081	.00060	.00021
%RSD	69.375	6.5744	19.715	5.2951	.13839	7.1250	.14609	1.7218	58.371
#1	-.00016	.00112	.00081	.00849	4.9589	.02031	55.723	.03501	-.00021
#2	-.00048	.00123	.00061	.00916	4.9492	.01836	55.608	.03417	-.00050
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	85.971	.00525	.00903	.00502	10.093	.00428	.00670	11.115	23.787
Stddev	.107	.00001	.00345	.00095	.021	.00107	.00507	.044	.095
%RSD	.12409	.25284	38.240	18.912	.20394	24.974	75.664	.39784	.39784
#1	85.895	.00524	.01147	.00435	10.078	.00352	.00311	11.147	23.854
#2	86.046	.00525	.00659	.00569	10.107	.00503	.01028	11.084	23.720
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00192	.81788	-.00032	-.00012	-.00964	-.01034	.00016	.00058	.00045
Stddev	.00070	.00109	.00106	.00005	.00203	.02215	.00036	.00013	.00008
%RSD	36.730	.13329	330.33	41.472	21.064	214.21	226.03	21.773	17.443
#1	.00142	.81865	.00043	-.00015	-.00821	.00532	.00042	.00067	.00050
#2	.00241	.81711	-.00107	-.00008	-.01108	-.02600	-.00010	.00049	.00039
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3047.5	51232.	5327.0						
Stddev	35.4	160.	28.0						
%RSD	1.1613	.31136	.52645						
#1	3022.5	51119.	5307.2						
#2	3072.5	51345.	5346.9						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 13:43:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00541	49.125	-.00854	.00415	.00051	.00012	1.0292	.03058	-.00008	-.00038	.00060	.00077	48.387
Stddev	.00002	.155	.00477	.00040	.00029	.00002	.0000	.00154	.00032	.00017	.00043	.00005	.594
%RSD	.31271	.31612	55.838	9.6265	56.182	14.024	.00270	5.0482	382.11	45.100	71.907	7.0054	1.2285
#1	-.00540	49.015	-.01191	.00387	.00072	.00011	1.0292	.03168	.00014	-.00051	.00029	.00074	47.967
#2	-.00542	49.234	-.00517	.00443	.00031	.00013	1.0292	.02949	-.00031	-.00026	.00090	.00081	48.807
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.13933	.00202	.05631	-.00165	-.00082	247.38	.00279	.00536	.00000	4.9919	-.00818	.00979	.00498
Stddev	.01221	.00042	.00272	.00009	.00038	.14	.00007	.00193	.00025	.0039	.00189	.00278	.00514
%RSD	8.7667	20.706	4.8343	5.5799	46.715	.05498	2.5110	35.908	25985.	.07790	23.116	28.408	103.37
#1	.13069	.00231	.05824	-.00158	-.00109	247.48	.00284	.00400	-.00018	4.9891	-.00684	.01176	.00134
#2	.14797	.00172	.05439	-.00171	-.00055	247.29	.00274	.00673	.00018	4.9946	-.00952	.00783	.00861
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.01065	-.00120	.00039	5.0368	-.01304	.00286	10.462	.00247	-.00060	-.13743			
Stddev	.01101	.00108	.00002	.0039	.00012	.00228	.026	.00096	.00027	.00475			
%RSD	103.37	89.611	6.3127	.07687	.92789	79.735	.24612	38.862	44.236	3.4572			
#1	.00287	-.00044	.00037	5.0340	-.01295	.00448	10.480	.00179	-.00041	-.14079			
#2	.01844	-.00196	.00040	5.0395	-.01312	.00125	10.444	.00315	-.00079	-.13407			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3104.2	52444.	5607.7										
Stddev	2.1	152.	14.2										
%RSD	.06873	.28894	.25340										
#1	3105.7	52551.	5617.7										
#2	3102.7	52337.	5597.6										

Sample Name: CCV-3290307 Acquired: 5/28/2015 13:46:30 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48580	.51780	.99642	.51776	.46629	.46403	-.00312	4.7114	.51025	.50245	.47736	.48409	2.3686
Stddev	.00138	.00051	.00070	.00184	.00074	.00049	.00089	.0250	.00124	.00372	.00176	.00124	.0021
%RSD	.28471	.09791	.07062	.35615	.15949	.10658	28.643	.53122	.24295	.73997	.36854	.25709	.08680
#1	.48482	.51816	.99692	.51907	.46682	.46438	-.00376	4.7291	.50937	.50508	.47860	.48321	2.3671
#2	.48677	.51744	.99593	.51646	.46577	.46368	-.00249	4.6937	.51112	.49982	.47612	.48497	2.3700
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.092	.95519	19.614	.51003	.49550	4.9856	.50127	1.0215	1.0118	-.00023	1.0104	1.0014	4.8393
Stddev	.115	.00632	.008	.00064	.00374	.0019	.00229	.0017	.0048	.00212	.0045	.0092	.0072
%RSD	.23942	.66184	.04028	.12492	.75549	.03766	.45667	.16327	.47514	933.06	.44899	.91640	.14935
#1	48.173	.95966	19.608	.50958	.49815	4.9870	.50289	1.0227	1.0152	-.00172	1.0136	1.0079	4.8342
#2	48.010	.95072	19.619	.51048	.49286	4.9843	.49965	1.0203	1.0084	.00127	1.0072	.99489	4.8444
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.356	1.0081	.46947	-.00587	.49496	1.0340	-.02436	.51700	.52118	.46327			
Stddev	.015	.0091	.00105	.00043	.00061	.0138	.00533	.00015	.00094	.00210			
%RSD	.14935	.89751	.22307	7.3249	.12266	1.3352	21.869	.02961	.17960	.45419			
#1	10.345	1.0145	.47021	-.00556	.49539	1.0437	-.02059	.51689	.52052	.46476			
#2	10.367	1.0017	.46873	-.00617	.49453	1.0242	-.02813	.51710	.52185	.46178			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3100.6	52079.	5303.2										
Stddev	9.0	52.	4.0										
%RSD	.28926	.10018	.07523										
#1	3094.3	52116.	5300.4										
#2	3107.0	52042.	5306.1										

Sample Name: CCB Acquired: 5/28/2015 13:48:55 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .00120	-0.00093	-0.00323	.00404	-0.00016	.00004	-0.00555	.00060	.00023	-0.0011	.00001
Stddev	.00043	.00002	.00100	.00005	.00005	.00003	.00091	.00122	.00035	.00012	.00034
%RSD	35.441	1.9357	30.818	1.1163	33.444	66.153	16.409	202.71	154.24	106.78	2345.2
#1	.00090	-.00092	-.00253	.00401	-.00012	.00006	-.00490	-.00026	-.00002	-.00020	.00026
#2	.00150	-.00094	-.00394	.00407	-.00019	.00002	-.00619	.00147	.00048	-.00003	-.00023
Check ?	Chk	Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00100										
Low Limit	-.00100										
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	.00058	.11036	.00223	.00261	.00004	.00019	.10860	-.00025	-.00085	-.00201
Stddev	.00050	.00224	.07001	.00032	.00449	.00013	.00017	.00267	.00016	.00208	.00293
%RSD	112.55	386.72	63.433	14.544	171.73	293.63	90.484	2.4573	63.370	244.39	145.95
#1	-.00009	-.00101	.06086	.00200	-.00056	.00013	.00007	.10671	-.00014	-.00233	-.00408
#2	-.00080	.00217	.15986	.00246	.00579	-.00005	.00031	.11049	-.00036	.00062	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00796	.00494	.00396	.03248	.06951	-.00048	.00002	.00167	.00011	.00061	-.03208
Stddev	.00000	.00128	.00568	.01883	.04030	.00084	.00004	.00071	.00033	.00035	.04731
%RSD	.02371	25.907	143.31	57.977	57.977	175.63	293.88	42.310	310.58	57.803	147.47
#1	.00796	.00584	-.00005	.01916	.04101	-.00108	.00005	.00117	-.00013	.00036	.00137
#2	.00796	.00403	.00798	.04579	.09800	.00012	-.00002	.00217	.00034	.00086	-.06554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00044	-.00031	.00034								
Stddev	.00017	.00031	.00170								
%RSD	39.383	99.274	498.53								
#1	-.00056	-.00053	.00154								
#2	-.00032	-.00009	-.00086								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3103.7	53279.	5268.7								
Stddev	.9	168.	26.8								
%RSD	.02883	.31600	.50825								
#1	3103.1	53160.	5249.8								
#2	3104.4	53398.	5287.6								

Sample Name: CCVL3296658 Acquired: 5/28/2015 13:51:11 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm F .00055	Al1670 ppm F -.00091	As1890 ppm F -.00392	B_2089 ppm F .00271	Ba4554 ppm F .00196	Be3130 ppm F .00020	Bi2230 ppm F -.00135	Ca3179 ppm F .04447	Cd2288 ppm F -.00007	Co2286 ppm F -.00032	Cr2055 ppm F -.00013
#1	.00062	-.00098	-.00256	.00259	.00384	.00049	-.00009	.08728	-.00004	-.00046	.00003
#2	.00048	-.00083	-.00529	.00284	.00008	-.00009	-.00260	.00166	-.00010	-.00018	-.00030
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units Avg Stddev %RSD	Cu3247 ppm F -.00040	Fe2599 ppm F .01926	K_7664 ppm F .75284	Li6707 ppm F .00204	Mg2790 ppm F .00363	Mn2576 ppm F .00002	Mo2020 ppm F .00022	Na5895 ppm F .31393	Ni2316 ppm F .00008	P_1782 ppm F -.00016	Pb2203 ppm F -.00037
#1	-.00033	.04034	1.4166	.00302	.00324	.00005	.00034	.53716	.00008	-.00004	-.00019
#2	-.00046	-.00182	.08911	.00106	.00401	.00000	.00011	.09070	.00008	-.00028	-.00054
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units Avg Stddev %RSD	S_1820 ppm F .00050	Sb2068 ppm F -.00312	Se1960 ppm F .00325	Si2881 ppm F .11839	SiO2 ppm F .25336	Sn1899 ppm F .00096	Sr4077 ppm F .00217	Th2837 ppm F .00048	Ti3349 ppm F -.00008	TI1908 ppm F .00224	U_3701 ppm F -.02573
#1	.00491	-.00498	.00102	.21841	.46739	.00054	.00428	.00141	-.00003	.00264	-.04862
#2	-.00390	-.00126	.00547	.01838	.03933	.00138	.00006	-.00044	-.00013	.00183	-.00283
Check ? Value Range	None -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units Avg Stddev %RSD	V_2924 ppm F -.00070	Zn2062 ppm F -.00010	Zr3391 ppm F .00466								
#1	-.00024	-.00001	.00688								
#2	-.00116	-.00018	.00245								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3217.9	Y_3600 Cts/S 55415.	Y_3774 Cts/S 5476.0								
#1	3245.8	55523.	5408.4								
#2	3190.1	55307.	5543.6								

Sample Name: MB 280-278892/1-A Acquired: 5/28/2015 13:53:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00059	-.00077	-.00210	.00260	.00101	-.00007	-.00123	.02921	.00020
#2	.00015	-.00109	-.00226	.00165	.00024	.00004	-.00157	.02813	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00007	-.00033	-.00083	.03649	.07984	.00138	-.00336	-.00007	-.00019
#2	-.00021	-.00005	-.00088	.03969	.06446	.00158	-.00440	.00000	-.00036
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.13372	-.00013	-.00280	-.00005	.00534	.00207	.00738	.03850	.08240
#2	.14885	.00083	-.00290	-.00049	-.00617	.00426	.00393	.02741	.05867
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00030	.00024	-.00057	.00001	.00118	-.00403	-.00027	.00091	-.00248
#2	.00051	.00014	.00031	.00007	.00169	-.01070	-.00130	.00028	-.00028
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3163.3	53915.	5312.8						
#2	3165.3	53759.	5296.1						

Sample Name: 280-69535-C-6-A Acquired: 5/28/2015 13:55:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00060	.00664	-.00474	.00765	.00336	-.00011	-.00478	10.144	.00049
#2	.00095	.00707	-.00869	.00692	.00366	-.00007	-.00356	10.125	-.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00032	.00675	-.00006	.01894	.62752	.00193	5.0706	.00057	-.00082
#2	-.00056	.00686	-.00020	.02289	.61393	.00393	5.0562	.00061	-.00042
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	7.0533	.00364	.06000	-.00404	1.1415	.00403	.00701	21.074	45.099
#2	7.0308	.00409	.06639	-.00495	1.1464	.00189	.00482	21.144	45.249
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00036	.08674	-.00142	.00034	.00291	.00513	.00366	.00270	.00018
#2	-.00136	.08734	-.00064	-.00059	-.00201	-.01089	.00414	.00305	.00027
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3127.2	53053.	5427.0						
#2	3126.4	53051.	5431.9						

Sample Name: 280-69535-C-6-A SD@5 Acquired: 5/28/2015 13:58:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00070	.00128	-.00475	.00322	.00062	.00002	-.00403	2.1367	.00022
Stddev	.00084	.00041	.00023	.00012	.00013	.00002	.00134	.0413	.00012
%RSD	119.04	31.988	4.8010	3.7848	20.712	88.612	33.255	1.9338	53.338
#1	.00011	.00099	-.00459	.00314	.00053	.00001	-.00497	2.1075	.00014
#2	.00130	.00157	-.00491	.00331	.00071	.00003	-.00308	2.1659	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	.00138	-.00043	.00628	.16256	.00193	1.0233	.00016	-.00034
Stddev	.00014	.00009	.00040	.00050	.02055	.00033	.0214	.00000	.00039
%RSD	27.359	6.2593	92.249	7.9783	12.640	17.116	2.0904	.55140	112.23
#1	-.00042	.00144	-.00015	.00593	.17709	.00216	1.0384	.00016	-.00062
#2	-.00061	.00132	-.00071	.00664	.14803	.00169	1.0081	.00016	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5577	.00075	.00922	-.00122	.22705	-.00092	.00259	4.2305	9.0533
Stddev	.0106	.00003	.00245	.00159	.00128	.00016	.00076	.0908	.1943
%RSD	.67789	3.7422	26.524	130.15	.56339	17.401	29.488	2.1465	2.1465
#1	1.5502	.00073	.00749	-.00010	.22796	-.00081	.00313	4.1663	8.9159
#2	1.5652	.00077	.01095	-.00235	.22615	-.00103	.00205	4.2947	9.1907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	.01779	.00155	-.00046	.00031	-.04552	.00018	.00036	.00005
Stddev	.00029	.00030	.00208	.00059	.00019	.01176	.00054	.00068	.00198
%RSD	33.637	1.6632	133.94	127.40	61.756	25.824	295.99	190.72	4249.0
#1	.00107	.01758	.00008	-.00005	.00017	-.03721	.00057	.00084	-.00135
#2	.00066	.01800	.00302	-.00088	.00044	-.05383	-.00020	-.00013	.00145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3214.7	54734.	5561.9						
Stddev	11.1	135.	176.7						
%RSD	.34579	.24608	3.1761						
#1	3206.9	54639.	5686.8						
#2	3222.6	54829.	5437.0						

Sample Name: 280-69535-C-6-B MS Acquired: 5/28/2015 14:00:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04623	As1890 ppm 1.9720	B_2089 ppm .99350	Ba4554 ppm 1.0607	Be3130 ppm 1.9037	Bi2230 ppm .04726	Ca3179 ppm F 2.0375	Ca3179 ppm 56.691	Cd2288 ppm .10379
#1	.04608	1.9709	.99287	1.0613	1.9113	.04721	2.0376	56.856	.10373	
#2	.04638	1.9731	.99412	1.0602	1.8961	.04731	2.0374	56.525	.10385	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .48783	Cu3247 ppm W .19321	Fe2599 ppm .24885	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}	
#1	.48863	.19447	.24902	.97012	49.612	.97720	53.857	.50957	1.0376	
#2	.48704	.19194	.24869	.97531	49.405	.96900	53.778	.50837	1.0364	
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 59.314	P_1782 ppm .49027	Pb2203 ppm W 10.530	S_1820 ppm .49228	Sb2068 ppm 3.2572	Se1960 ppm .53264	Si2881 ppm 2.0620	SiO2 ppm 31.046	
#1	59.226	.49192	10.521	.49134	3.2553	.53151	2.0656	30.973	66.283	
#2	59.402	.48862	10.539	.49321	3.2591	.53377	2.0584	31.118	66.593	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0527	Th2837 ppm 1.0411	Ti3349 ppm 1.0149	Tl1908 ppm 1.0146	U_3701 ppm 1.9788	V_2924 ppm 2.1107	Zn2062 ppm .52227	Zr3391 ppm .50870	
#1	2.0477	1.0449	1.0168	1.0163	1.9767	2.0967	.52242	.50741	.44379	
#2	2.0577	1.0373	1.0130	1.0128	1.9809	2.1247	.52213	.50999	.44625	
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3072.5	Y_3774 Cts/S 52172.							
#1	3080.3	52021.	5428.9							
#2	3064.7	52324.	5437.3							

Sample Name: 280-69535-C-6-C MSD Acquired: 5/28/2015 14:03:14 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0111	As1890 ppm 1.0151	B_2089 ppm 1.0781	Ba4554 ppm 1.9219	Be3130 ppm .04757	Bi2230 ppm F 2.0810	Ca3179 ppm 57.119	Cd2288 ppm .10589
#1	.04792	2.0152	1.0129	1.0784	1.9128	.04701	2.0788	56.826	.10623
#2	.04652	2.0069	1.0173	1.0779	1.9310	.04813	2.0832	57.413	.10556
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .19755	Cu3247 ppm .25416	Fe2599 ppm .95749	K_7664 ppm 50.041	Li6707 ppm .98631	Mg2790 ppm 54.721	Mn2576 ppm .51673	Mo2020 ppm 1.0497
#1	.49795	.19696	.25422	.94730	49.777	.98040	54.841	.51711	1.0505
#2	.49645	.19813	.25409	.96768	50.306	.99221	54.601	.51635	1.0489
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .49958	P_1782 ppm W 10.787	Pb2203 ppm .49764	S_1820 ppm 3.3064	Sb2068 ppm .53740	Se1960 ppm 2.1192	Si2881 ppm 31.338	SiO2 ppm 67.064
#1	59.923	.49861	10.783	.49709	3.3044	.53686	2.1082	31.167	66.698
#2	60.302	.50054	10.790	.49819	3.3085	.53793	2.1303	31.510	67.431
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 1.0490	Th2837 ppm 1.0374	Ti3349 ppm 1.0239	Tl1908 ppm 2.0249	U_3701 ppm 2.1076	V_2924 ppm .53056	Zn2062 ppm .51254	Zr3391 ppm .44936
#1	2.0626	1.0430	1.0381	1.0253	2.0166	2.1288	.53174	.51396	.44520
#2	2.0878	1.0550	1.0367	1.0225	2.0331	2.0864	.52938	.51111	.45351
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 52383.	Y_3774 Cts/S 5487.8	377.433 {89}					
#1	3073.5	52350.	5494.0						
#2	3085.7	52416.	5481.5						

Sample Name: 280-69535-C-7-A Acquired: 5/28/2015 14:05:34 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.00280	-.00476	.07994	.00710	.00001	-.00052	21.848	.00031
Stddev	.00079	.00037	.00225	.00160	.00024	.00002	.00065	.409	.00003
%RSD	131.17	13.384	47.254	2.0061	3.3162	210.71	124.77	1.8706	8.8182
#1	.00004	.00253	-.00635	.07881	.00727	.00000	-.00099	21.559	.00029
#2	.00116	.00306	-.00317	.08108	.00694	.00002	-.00006	22.137	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00050	.00009	.40653	1.0670	.00303	10.231	.55152	.00057
Stddev	.00004	.00042	.00039	.00231	.0107	.00252	.036	.00177	.00001
%RSD	417.10	84.996	457.84	.56779	1.0008	83.281	.35262	.32130	1.7425
#1	.00004	.00080	.00036	.40490	1.0595	.00482	10.206	.55027	.00058
#2	-.00002	.00020	-.00019	.40816	1.0746	.00125	10.257	.55277	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.750	.00233	.20350	-.00194	1.9050	-.00120	.00289	26.134	55.927
Stddev	.045	.00016	.00398	.00107	.0093	.00446	.00497	.057	.121
%RSD	.38191	6.8468	1.9580	55.308	.48964	372.19	172.37	.21673	.21673
#1	11.719	.00244	.20632	-.00270	1.8984	.00196	-.00063	26.094	55.841
#2	11.782	.00222	.20068	-.00118	1.9116	-.00435	.00640	26.174	56.013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00129	.11501	-.00057	.00032	-.00030	-.00766	.00043	.00173	.00046
Stddev	.00018	.00343	.00070	.00067	.00014	.00794	.00011	.00009	.00051
%RSD	14.180	2.9860	122.57	205.93	46.548	103.68	26.356	5.3168	109.83
#1	.00116	.11258	-.00107	.00080	-.00040	-.00204	.00035	.00179	.00082
#2	.00142	.11744	-.00008	-.00015	-.00020	-.01327	.00051	.00166	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3146.4	53099.	5512.2						
Stddev	14.0	172.	143.2						
%RSD	.44473	.32376	2.5972						
#1	3136.5	53221.	5613.4						
#2	3156.3	52978.	5410.9						

Sample Name: 280-69535-C-8-A Acquired: 5/28/2015 14:08:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00064	As1890 ppm -.00240	B_2089 ppm -.00047	Ba4554 ppm .00623	Be3130 ppm .01101	Bi2230 ppm -.00006	Ca3179 ppm 11.292	Cd2288 ppm .00007
#1	.00047	-.00250	-.00650	.00704	.01121	.00000	-.00343	11.293	-.00003
#2	.00081	-.00230	.00556	.00542	.01080	-.00012	-.00589	11.291	.00016
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00694	Cu3247 ppm .00116	Fe2599 ppm .00027	K_7664 ppm 34.409	Li6707 ppm .29017	Mg2790 ppm .00346	Mn2576 ppm 7.5267	Mo2020 ppm .48191
#1	.00685	.00106	-.00023	34.389	.26758	.00187	7.5252	.48213	-.00112
#2	.00704	.00126	.00077	34.430	.31277	.00504	7.5282	.48170	-.00104
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 8.0700	P_1782 ppm .00463	Pb2203 ppm .03958	S_1820 ppm -.00171	Sb2068 ppm .05691	Se1960 ppm .00045	Si2881 ppm .00370	SiO2 ppm 12.202
#1	8.0593	.00501	.03903	-.00155	.05608	-.00158	.00851	12.195	26.098
#2	8.0806	.00425	.04012	-.00188	.05775	.00249	-.00110	12.209	26.127
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00075	Th2837 ppm .09177	Ti3349 ppm .00552	Tl1908 ppm -.00015	U_3701 ppm -.02012	V_2924 ppm .00098	Zn2062 ppm .00177	Zr3391 ppm -.00135
#1	.00124	.09185	.00461	.00026	.00011	-.00069	.00149	.00212	-.00116
#2	.00026	.09168	.00643	.00078	-.00042	-.03955	.00048	.00142	-.00153
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3170.5	Y_3774 Cts/S 53978.	377.433 {89}					
#1	3165.7	54027.	5503.4						
#2	3175.3	53929.	5524.2						

Sample Name: 280-69535-C-9-A Acquired: 5/28/2015 14:10:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.00181	-.00450	.00544	.00259	-.00016	-.00429	12.853	.00043
Stddev	.00063	.00002	.00159	.00066	.00044	.00003	.00294	.189	.00014
%RSD	155.22	1.3732	35.353	12.114	16.932	19.720	68.593	1.4689	34.016
#1	-.00004	.00183	-.00562	.00497	.00228	-.00018	-.00636	12.720	.00032
#2	.00085	.00179	-.00337	.00590	.00290	-.00014	-.00221	12.987	.00053
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.00221	-.00014	.00583	.59717	.00377	8.5409	.00014	-.00076
Stddev	.00014	.00018	.00046	.00303	.02914	.00055	.0446	.00003	.00005
%RSD	27.599	8.3078	316.48	51.965	4.8793	14.637	.52171	22.656	5.9783
#1	-.00039	.00234	.00018	.00369	.61778	.00338	8.5724	.00012	-.00079
#2	-.00059	.00208	-.00047	.00797	.57657	.00416	8.5094	.00016	-.00073
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8415	.00071	.01770	-.00063	.79195	.00057	.00510	11.393	24.380
Stddev	.0343	.00001	.00100	.00007	.00618	.00229	.00454	.168	.358
%RSD	.70802	2.0014	5.6454	11.478	.78064	405.01	89.005	1.4704	1.4704
#1	4.8172	.00070	.01699	-.00068	.78758	.00219	.00189	11.274	24.127
#2	4.8657	.00072	.01841	-.00058	.79632	-.00105	.00831	11.511	24.634
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	.06733	-.00002	.00004	-.00094	-.03431	.00404	.00030	-.00060
Stddev	.00085	.00134	.00074	.00007	.00024	.03176	.00028	.00030	.00194
%RSD	86.545	1.9952	3645.0	204.12	25.520	92.566	6.8791	99.811	321.33
#1	.00157	.06638	-.00054	.00009	-.00111	-.05677	.00385	.00051	.00077
#2	.00038	.06828	.00050	-.00002	-.00077	-.01185	.00424	.00009	-.00198
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3158.6	53507.	5383.5						
Stddev	2.4	383.	47.1						
%RSD	.07687	.71527	.87581						
#1	3160.3	53237.	5416.8						
#2	3156.9	53778.	5350.1						

Sample Name: 280-69536-B-1-A Acquired: 5/28/2015 14:13:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	.04834	-.00119	.04422	.05615	-.00005	-.00326	27.799	.00006
Stddev	.00021	.00067	.00218	.00105	.00032	.00004	.00249	.086	.00017
%RSD	96.948	1.3761	182.61	2.3698	.57075	76.115	76.390	.31088	281.31
#1	-.00037	.04881	-.00273	.04496	.05592	-.00007	-.00150	27.738	-.00006
#2	-.00007	.04787	.00035	.04348	.05638	-.00002	-.00503	27.861	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.01048	.00086	.15097	1.2060	.00435	3.6233	.00304	.00002
Stddev	.00030	.00011	.00054	.00105	.0410	.00062	.0490	.00010	.00026
%RSD	52.526	1.0540	62.842	.69261	3.3972	14.308	1.3520	3.3414	1390.8
#1	-.00036	.01056	.00048	.15023	1.1770	.00479	3.6579	.00311	.00020
#2	-.00079	.01040	.00124	.15171	1.2350	.00391	3.5886	.00297	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.839	.00258	.02541	-.00095	3.9977	.00016	.00490	14.800	31.673
Stddev	.524	.00024	.00122	.00152	.0290	.00029	.00423	.020	.042
%RSD	2.0283	9.3763	4.8052	159.73	.72510	178.24	86.312	.13395	.13395
#1	26.209	.00275	.02627	.00012	4.0182	-.00004	.00790	14.786	31.643
#2	25.468	.00241	.02455	-.00203	3.9772	.00037	.00191	14.814	31.703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00187	.42098	.00150	.00299	-.00348	-.02964	.02399	.00379	-.00253
Stddev	.00230	.00174	.00251	.00048	.00165	.02659	.00005	.00059	.00202
%RSD	122.44	.41239	167.23	16.226	47.562	89.701	.20207	15.651	80.139
#1	.00025	.41975	.00328	.00333	-.00465	-.04845	.02402	.00421	-.00396
#2	.00350	.42221	-.00027	.00265	-.00231	-.01084	.02395	.00337	-.00109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3135.6	52820.	5444.0						
Stddev	13.7	382.	10.5						
%RSD	.43544	.72273	.19304						
#1	3125.9	52550.	5451.4						
#2	3145.2	53090.	5436.6						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 14:15:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00541	Al3092 ppm 49.603	As1890 ppm -.00342	B_2089 ppm .00344	Ba4554 ppm .00054	Be3130 ppm .00000	Bi2230 ppm 1.0306	Ca3179 ppm .03217	Cd2288 ppm -.00024	Co2286 ppm -.00077	Cr2055 ppm .00064
#1	-.00644	49.768	-.00123	.00361	.00040	-.00003	1.0280	.03749	-.00040	-.00079	.00060
#2	-.00439	49.439	-.00562	.00326	.00068	.00004	1.0332	.02684	-.00008	-.00074	.00068
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00078	Fe2714 ppm 48.993	K_7664 ppm .11065	Li6707 ppm .00264	Mg2790 ppm .05450	Mn2576 ppm -.00157	Mo2020 ppm -.00077	Na8183 ppm 249.16	Ni2316 ppm .00242	P_1782 ppm .00455	Pb2203 ppm .00012
#1	.00079	48.972	.15178	.00217	.05571	-.00165	-.00126	249.48	.00231	.00179	.00080
#2	.00077	49.014	.06952	.00312	.05329	-.00150	-.00029	248.85	.00253	.00730	-.00056
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0361	Sb2068 ppm -.00818	Se1960 ppm .00808	Si2881 ppm .00702	SiO2 ppm .01503	Sn1899 ppm -.00123	Sr4077 ppm .00038	Th2837 ppm 5.0813	Ti3349 ppm -.01282	Tl1908 ppm .00382	U_3701 ppm W 10.596
#1	5.0136	-.00633	.00988	.00527	.01128	-.00203	.00039	5.0831	-.01284	.00501	10.611
#2	5.0586	-.01003	.00627	.00877	.01877	-.00043	.00037	5.0796	-.01281	.00264	10.580
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00286	Zn2062 ppm .00055	Zr3391 ppm -.14047								
#1	.00257	.00117	-.14106								
#2	.00314	-.00007	-.13989								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3108.8	Y_3600 Cts/S 52022.	Y_3774 Cts/S 5417.0								
#1	3107.1	51875.	5408.2								
#2	3110.4	52169.	5425.9								

Sample Name: CCV-3290307 Acquired: 5/28/2015 14:18:23 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48633	.51614	.99380	.51567	.46492	.46123	-.00403	4.6468	.51253	.49643	.48342	.48822	2.3450
Stddev	.00114	.00285	.01035	.00098	.00425	.00404	.00316	.0368	.00157	.00127	.00006	.00251	.0075
%RSD	.23379	.55161	1.0418	.19037	.91392	.87532	78.438	.79250	.30586	.25613	.01152	.51498	.32024
#1	.48552	.51815	1.0011	.51636	.46792	.46408	-.00180	4.6728	.51364	.49732	.48346	.48644	2.3503
#2	.48713	.51413	.98647	.51497	.46191	.45837	-.00627	4.6208	.51142	.49553	.48338	.49000	2.3397

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.811	.95249	19.477	.51033	.48925	4.9389	.49695	1.0220	.99913	.00393	1.0091	1.0031	4.7711
Stddev	.368	.00690	.024	.00034	.00157	.0643	.00339	.0066	.00646	.00225	.0018	.0000	.0023
%RSD	.77074	.72438	.12427	.06641	.31996	1.3018	.68171	.64677	.64677	.57.419	.17556	.00252	.04766
#1	48.072	.95737	19.459	.51009	.49036	4.9844	.49935	1.0267	1.0037	.00552	1.0103	1.0031	4.7727
#2	47.551	.94761	19.494	.51057	.48814	4.8934	.49456	1.0173	.99456	.00233	1.0078	1.0032	4.7695

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.210	.99483	.46856	-.00326	.49709	1.0231	-.04862	.51799	.51433	.46260			
Stddev	.005	.00324	.00415	.00013	.00039	.0080	.01177	.00027	.00469	.00002			
%RSD	.04766	.32522	.88492	3.8530	.07785	.77873	24.204	.05252	.91116	.00502			
#1	10.214	.99712	.47149	-.00318	.49682	1.0288	-.04030	.51779	.51101	.46262			
#2	10.207	.99254	.46563	-.00335	.49736	1.0175	-.05694	.51818	.51764	.46258			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3180.4	53706.	5542.6										
Stddev	19.9	116.	63.5										
%RSD	.62691	.21550	1.1456										
#1	3166.3	53787.	5497.7										
#2	3194.5	53624.	5587.5										

Sample Name: CCB Acquired: 5/28/2015 14:20:48 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00051	Al1670 ppm -.00093	As1890 ppm -.00191	B_2089 ppm .00285	Ba4554 ppm -.00010	Be3130 ppm -.00006	Bi2230 ppm -.00474	Ca3179 ppm -.00216	Cd2288 ppm .00026	Co2286 ppm -.00039	Cr2055 ppm -.00008	Cu3247 ppm -.00034	Fe2599 ppm -.00168
#1	.00060	-.00056	-.00131	.00293	.00000	-.00012	-.00446	-.00282	.00012	-.00051	.00004	-.00053	.00041
#2	.00042	-.00129	-.00251	.00277	-.00021	.00000	-.00502	-.00151	.00039	-.00028	-.00019	-.00015	-.00377
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .08324	Li6707 ppm -.00033	Mg2790 ppm .00219	Mn2576 ppm -.00005	Mo2020 ppm .00024	Na5895 ppm .09123	Ni2316 ppm .00008	P_1782 ppm -.00144	Pb2203 ppm -.00151	S_1820 ppm .00003	Sb2068 ppm -.00134	Se1960 ppm .00262	Si2881 ppm .03090
#1	.10232	-.00105	.00510	.00002	-.00011	.08996	.00025	-.00133	-.00251	.00007	-.00277	.00353	.01709
#2	.06415	.00039	-.00071	-.00012	.00059	.09249	-.00009	-.00154	-.00050	-.00001	.00009	.00171	.04471
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .06612	Sn1899 ppm -.00040	Sr4077 ppm .00001	Th2837 ppm -.00109	Ti3349 ppm .00027	TI1908 ppm .00163	U_3701 ppm .01368	V_2924 ppm -.00013	Zn2062 ppm -.00016	Zr3391 ppm .00135			
#1	.03657	-.00048	-.00006	-.00026	-.00012	.00262	.01685	-.00054	.00029	-.00034			
#2	.09567	-.00033	.00008	-.00192	.00065	.00064	.01050	.00028	-.00061	.00304			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3178.3	Y_3600 Cts/S 55205.	Y_3774 Cts/S 5583.4										
#1	3169.9	55305.	5572.1										
#2	3186.7	55106.	5594.7										

Sample Name: CCVL3296658 Acquired: 5/28/2015 14:23:06 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F -.00002	F -.00095	F -.00353	F .00132	F .00198	F .00013	F -.00281	F .04055	F .00007	F -.00010	F -.00002
Stddev	.00034	.00015	.00054	.00053	.00270	.00034	.00151	.05729	.00041	.00003	.00001
%RSD	1552.9	16.245	15.318	40.102	136.34	266.07	53.732	141.26	608.19	29.318	49.123
#1	.00022	-.00106	-.00391	.00169	.00388	.00037	-.00388	.08106	-.00022	-.00012	-.00001
#2	-.00026	-.00084	-.00315	.00094	.00007	-.00011	-.00174	.00005	.00036	-.00008	-.00003
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00037	F .02003	F .71931	F .00434	F .00141	F .00001	F .00007	F .30091	F .00011	F -.00018	F -.00105
Stddev	.00030	.02804	.89210	.00052	.00005	.00001	.00006	.29840	.00000	.00048	.00042
%RSD	80.622	139.98	124.02	12.012	3.8005	87.128	85.961	99.164	3.9801	268.01	40.222
#1	-.00058	.03986	1.3501	.00471	.00145	.00002	.00003	.51191	.00011	.00016	-.00135
#2	-.00016	.00020	.08850	.00397	.00137	.00001	.00011	.08991	.00011	-.00052	-.00075
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	-.00057	F -.00065	F .00380	F .11226	F .24024	F -.00026	F .00206	F .00188	F .00021	F .00251	F -.03926
Stddev	.00546	.00017	.00635	.15993	.34226	.00096	.00275	.00027	.00024	.00107	.02493
%RSD	962.25	25.610	167.11	142.46	142.46	365.55	133.62	14.557	113.96	42.780	63.509
#1	-.00443	-.00053	-.00069	.22535	.48226	.00042	.00401	.00207	.00004	.00327	-.05689
#2	.00329	-.00077	.00829	-.00083	-.00177	-.00095	.00011	.00168	.00038	.00175	-.02163
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00027	F -.00043	F .00301								
Stddev	.00033	.00039	.00345								
%RSD	121.26	92.033	114.60								
#1	-.00050	-.00015	.00546								
#2	-.00004	-.00070	.00057								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3209.8	55032.	5597.9								
Stddev	6.4	71.	28.8								
%RSD	.19922	.12879	.51460								
#1	3214.4	54982.	5577.5								
#2	3205.3	55082.	5618.2								

Sample Name: 280-69536-B-2-A Acquired: 5/28/2015 14:25:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	-.00126	-.00464	.00149	.05783	-.00004	-.00464	28.294	-.00001
Stddev	.00010	.00025	.00089	.00032	.00007	.00012	.00324	.002	.00005
%RSD	29.268	19.751	19.268	21.692	.11622	286.95	69.839	.00567	386.94
#1	.00043	-.00109	-.00527	.00172	.05788	.00004	-.00693	28.295	-.00005
#2	.00028	-.00144	-.00400	.00127	.05778	-.00012	-.00235	28.293	.00002
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	-.00025	.00007	.06225	1.2425	.00483	.17388	.00010	-.00023
Stddev	.00004	.00006	.00002	.00204	.0148	.00212	.23783	.00011	.00012
%RSD	48.405	22.953	33.242	3.2713	1.1937	43.814	136.78	111.26	55.292
#1	-.00012	-.00029	.00005	.06081	1.2530	.00333	.34205	.00018	-.00031
#2	-.00006	-.00021	.00008	.06369	1.2320	.00633	.00571	.00002	-.00014
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.567	.00050	-.00222	W -.00590	-.00093	.00174	.00303	15.338	32.822
Stddev	.026	.00032	.00084	.00140	.00437	.00002	.00064	.034	.072
%RSD	.09057	64.462	38.104	23.718	470.16	1.0704	21.198	.21950	.21950
#1	28.549	.00072	-.00162	-.00491	-.00402	.00176	.00257	15.314	32.771
#2	28.586	.00027	-.00281	-.00689	.00216	.00173	.00348	15.361	32.873
Check ?	Chk	Pass	Chk	Pass	Chk Warn 10.000 -.00300	Chk	Pass	Chk	Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.45123	.00068	-.00016	.00111	-.03157	.00081	.00029	-.00088
Stddev	.00115	.00014	.00181	.00006	.00276	.00961	.00172	.00030	.00077
%RSD	377.06	.03136	267.89	36.023	248.59	30.455	212.38	103.53	87.924
#1	-.00051	.45113	-.00060	-.00020	.00307	-.02477	.00202	.00049	-.00033
#2	.00112	.45133	.00196	-.00012	-.00084	-.03837	-.00041	.00008	-.00142
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3223.2	55447.	5526.5						
Stddev	8.5	82.	8.4						
%RSD	.26363	.14835	.15255						
#1	3217.1	55505.	5520.6						
#2	3229.2	55389.	5532.5						

Sample Name: 280-69536-B-3-A Acquired: 5/28/2015 14:27:56 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00012	.00703	-.00313	.03555	.09193	-.00013	-.00239	35.597	.00017
#2	.00072	.00713	-.00096	.03641	.09433	-.00006	-.00479	36.786	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00070	.01014	.00006	.06732	1.2237	.00374	5.2698	.01919	-.00081
#2	-.00067	.00989	.00020	.06319	1.2556	.00480	5.2995	.01915	-.00083
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	24.557	.00277	.02337	.00063	4.2130	.00138	.00840	15.140	32.400
#2	25.169	.00288	.01867	-.00159	4.2324	-.00102	.00484	15.471	33.108
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00329	.53693	-.00059	.00024	-.00036	-.05901	.01676	.00145	.00077
#2	-.00060	.55428	-.00230	.00003	-.00419	.00265	.01807	.00079	.00144
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3157.2	53515.	5538.5						
#2	3152.4	53223.	5398.6						

Sample Name: 280-69536-B-5-A Acquired: 5/28/2015 14:30:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00005	.04236	.00354	.04671	.04772	-.00008	.00093	25.231	.00043
#2	.00007	.04125	.00231	.04534	.04749	-.00005	-.00509	25.272	.00054
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	26.132	.00253	.04112	-.00169	3.8169	.00188	.01183	15.489	33.145
#2	26.877	.00329	.03653	-.00063	3.8427	.00053	.00497	15.562	33.302
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00132	.38250	.00094	.00288	-.00220	-.03207	.02691	.00256	.00056
#2	.00063	.38298	.00225	.00298	-.00416	-.01734	.02583	.00312	-.00067
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3121.0	53082.	5528.8						
#2	3211.2	52909.	5566.4						

Sample Name: 280-69556-E-1-A Acquired: 5/28/2015 14:33:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00611	-.00507	.00822	.00172	-.00007	-.00243	10.392	.00033
Stddev	.00032	.00014	.00310	.00106	.00007	.00011	.00182	.075	.00007
%RSD	503.24	2.3026	61.016	12.913	4.3104	157.35	74.786	.72278	19.581
#1	.00029	.00621	-.00288	.00747	.00167	.00001	-.00114	10.339	.00029
#2	-.00016	.00601	-.00726	.00897	.00178	-.00015	-.00371	10.445	.00038
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00024	.00037	.04246	.72329	.00256	6.5134	.05747	-.00026
Stddev	.00015	.00016	.00014	.00070	.00350	.00158	.0047	.00026	.00019
%RSD	413.79	66.553	37.185	1.6387	.48376	61.663	.07189	.45322	71.974
#1	.00015	.00036	.00027	.04197	.72576	.00368	6.5167	.05765	-.00040
#2	-.00007	.00013	.00047	.04295	.72082	.00145	6.5101	.05728	-.00013
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.6085	.00212	.01855	-.00123	1.5106	.00009	-.00061	12.621	27.008
Stddev	.0429	.00029	.00206	.00041	.0014	.00156	.00329	.169	.361
%RSD	.93167	13.514	11.119	32.899	.09325	1779.7	540.72	1.3353	1.3353
#1	4.5782	.00192	.02001	-.00152	1.5116	.00119	-.00293	12.501	26.753
#2	4.6389	.00232	.01709	-.00095	1.5096	-.00102	.00172	12.740	27.263
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.08005	-.00155	.00004	.00004	.00219	.00110	.00329	.00018
Stddev	.00082	.00114	.00115	.00035	.00222	.02091	.00048	.00055	.00112
%RSD	130.95	1.4262	74.126	820.74	6269.0	953.28	44.143	16.773	632.23
#1	.00121	.07924	-.00074	.00029	.00161	.01698	.00144	.00368	.00097
#2	.00005	.08086	-.00237	-.00020	-.00154	-.01259	.00075	.00290	-.00062
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3256.1	55415.	5695.8						
Stddev	1.9	241.	55.9						
%RSD	.05962	.43472	.98202						
#1	3257.5	55245.	5735.4						
#2	3254.7	55586.	5656.3						

Sample Name: 280-69556-E-2-A Acquired: 5/28/2015 14:35:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00143	-.00343	.05941	.01030	-.00008	-.00326	21.382	.00030
Stddev	.00037	.00014	.00271	.00059	.00012	.00014	.00068	.098	.00018
%RSD	404.90	9.5519	78.954	.99041	1.2118	183.70	20.918	.45949	59.914
#1	.00036	.00153	-.00535	.05983	.01021	-.00018	-.00278	21.313	.00042
#2	-.00017	.00134	-.00152	.05900	.01039	.00002	-.00374	21.452	.00017
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00006	.00048	.07128	3.1668	.00116	6.8922	2.7660	-.00123
Stddev	.00039	.00032	.00084	.00392	.0148	.00191	.1204	.0081	.00005
%RSD	702.82	500.29	174.27	5.4935	.46850	164.76	1.7464	.29336	4.4415
#1	.00033	.00029	.00107	.06851	3.1563	-.00019	6.9773	2.7717	-.00127
#2	-.00022	-.00016	-.00011	.07405	3.1772	.00250	6.8071	2.7602	-.00119
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.3347	.00314	.09160	-.00111	2.0520	.00280	.00255	15.046	32.198
Stddev	.0211	.00005	.00081	.00193	.0047	.00036	.00121	.117	.251
%RSD	.33331	1.6043	.88531	174.74	.23068	12.880	47.578	.77867	.77867
#1	6.3198	.00310	.09217	-.00248	2.0554	.00306	.00340	14.963	32.021
#2	6.3496	.00317	.09103	.00026	2.0487	.00255	.00169	15.129	32.375
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00097	.25964	-.00040	-.00010	-.00294	-.00370	-.00015	.00314	.00020
Stddev	.00064	.00109	.00046	.00016	.00085	.00965	.00045	.00086	.00025
%RSD	65.687	.42082	116.94	160.10	28.988	260.96	290.61	27.528	126.94
#1	.00142	.25887	-.00073	.00001	-.00355	-.01052	-.00047	.00375	.00038
#2	.00052	.26042	-.00007	-.00021	-.00234	.00312	.00016	.00253	.00002
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3197.4	54559.	5614.3						
Stddev	2.6	266.	59.1						
%RSD	.08253	.48796	1.0521						
#1	3195.6	54371.	5656.1						
#2	3199.3	54747.	5572.5						

Sample Name: 280-69560-A-1-A Acquired: 5/28/2015 14:38:12 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00117	.00358	-.01228	.03663	.01752	-.00016	-.00137	280.00	-.00011
#2	-.00014	.00424	.00100	.03593	.01730	-.00024	-.00650	279.92	-.00051
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00034	.00068	.00126	.01165	2.7575	.04689	45.912	.00061	-.00274
#2	-.00091	.00056	.00020	.01056	.0297	.00146	.050	.00004	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	195.51	.00430	.01677	.00397	330.12	.00742	.01956	11.023	23.589
#2	194.64	.00437	.01247	.00433	330.70	.00367	.01444	11.088	23.729
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00130	5.6614	.00068	-.00008	-.00849	.02277	-.00183	.00151	.00135
#2	.00042	5.6941	-.00387	.00029	-.01332	-.00829	-.00152	.00155	.00103
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2965.8	50092.	5499.2						
#2	2981.2	50434.	5501.6						

Sample Name: 280-69578-B-1-A Acquired: 5/28/2015 14:40:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00223	.02379	-.00257	5.3124	.21525	-.00020	.00115	W 717.30	.00018
#2	.00016	.00038	.00040	.1310	.00122	.00022	.00396	11.61	.00015
	7.3424	1.5826	15.394	2.4667	.56610	110.43	345.19	1.6185	88.002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00381	.00371	.00664	.04323	F 542.53	W 5.7891	W 769.00	.06991	.08155
#2	.00070	.00021	.00193	.00113	7.69	.0215	4.67	.00015	.00249
	18.314	5.5645	28.974	2.6050	1.4178	.37132	.60664	.21148	3.0514
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Warn 2.0000 -.01000	Chk Warn 500.00 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	F 19358.	.01635	.05570	.00310	F 945.98	.02793	.01811	.11157	.23875
#2	77.	.00087	.00137	.00006	25.48	.00070	.00105	.00590	.01263
	.39738	5.3056	2.4529	1.9875	2.6934	2.4947	5.7825	5.2897	5.2897
Check ? High Limit Low Limit	Chk Fail 10000. 9.0000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00171	W 19.853	-.00019	.00568	W -.01353	.54416	.11964	.00262	.00360
#2	.00125	.160	.00161	.00049	.00193	.02610	.00027	.00121	.00141
	72.949	.80681	850.37	8.6315	14.250	4.7960	.22493	46.188	39.256
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2102.8	34304.	4829.8						
#2	37.3	149.	92.3						
	1.7756	.43399	1.9106						
Int. Std. Line Units Avg Stddev %RSD	2076.4	34199.	4895.1						
#1	2129.2	34409.	4764.6						

Sample Name: 280-69578-B-2-A Acquired: 5/28/2015 14:44:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00393	As1890 ppm .00530	B_2089 ppm .00805	Ba4554 ppm .03291	Be3130 ppm .00008	Bi2230 ppm .00160	Ca3179 ppm 378.98	Cd2288 ppm .00123
#1	.00408	.00482	.00779	3.4603	.03255	.00015	.00231	372.41	.00152
#2	.00377	.00578	.00830	3.4752	.03326	.00001	-.00552	385.55	.00094
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00404	Cu3247 ppm .00147	Fe2599 ppm .00499	K_7664 ppm F 534.93	Li6707 ppm W 5.2705	Mg2790 ppm W 599.66	Mn2576 ppm .00070	Mo2020 ppm .05424
#1	-.00420	.00134	.00472	.01303	526.50	5.2069	593.80	.00073	.05439
#2	-.00387	.00160	.00525	.01011	543.35	5.3341	605.52	.00067	.05409
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Warn 2.0000 -.01000	Chk Warn 500.00 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm F 17690.	P_1782 ppm .00817	Pb2203 ppm .05506	S_1820 ppm F 1032.6	Sb2068 ppm .00826	Se1960 ppm .05611	Si2881 ppm 24.064	SiO2 ppm 51.496
#1	17539.	.00799	.05377	.00344	1025.4	.01391	.05481	24.028	51.419
#2	17842.	.00836	.05635	-.00071	1039.8	.00260	.05741	24.099	51.573
Check ? High Limit Low Limit	Chk Fail 10000. 9.0000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm F 20.278	Th2837 ppm .00572	Ti3349 ppm .00121	Tl1908 ppm -.00905	U_3701 ppm .06008	V_2924 ppm .01216	Zn2062 ppm .00129	Zr3391 ppm -.00062
#1	-.00125	20.289	.00545	.00112	-.00809	.08664	.01112	.00219	-.00119
#2	-.00091	20.267	.00599	.00131	-.01000	.03353	.01321	.00039	-.00006
Check ? High Limit Low Limit	Chk Pass	Chk Fail 20.000 -.02000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2165.4	Y_3774 Cts/S 35184.	377.433 {89}					
#1	2172.5	35442.	5023.1						
#2	2158.3	34926.	4835.5						

Sample Name: 280-69615-E-1-A Acquired: 5/28/2015 14:47:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00006	As1890 ppm .01520	B_2089 ppm .00202	Ba4554 ppm .03351	Be3130 ppm .04101	Bi2230 ppm .00022	Ca3179 ppm 27.061	Cd2288 ppm .00029
#1	-.00002	.01518	.00006	.03455	.04095	.00024	-.00168	27.036	.00030
#2	-.00009	.01521	.00398	.03246	.04107	.00019	-.00074	27.085	.00027
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00060	Cu3247 ppm .01345	Fe2599 ppm .00003	K_7664 ppm .03743	Li6707 ppm 2.3614	Mg2790 ppm .00477	Mn2576 ppm .36900	Mo2020 ppm .00149
#1	-.00071	.01337	.00025	.03677	2.4132	.00485	3.6940	.00145	.00009
#2	-.00049	.01352	-.00030	.03810	2.3096	.00468	3.6861	.00153	-.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 21.448	P_1782 ppm .00214	Pb2203 ppm .03817	S_1820 ppm -.00080	Sb2068 ppm 4.4677	Se1960 ppm .00496	Si2881 ppm .00104	SiO2 ppm 12.846
#1	21.245	.00223	.03711	-.00201	4.4399	.00732	.00122	12.807	27.408
#2	21.651	.00204	.03923	.00041	4.4955	.00260	.00085	12.884	27.573
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00038	Th2837 ppm .35353	Ti3349 ppm -.00033	Tl1908 ppm .00025	U_3701 ppm -.0255	V_2924 ppm .02287	Zn2062 ppm .00198	Zr3391 ppm .00107
#1	-.00002	.35305	-.00009	.00023	-.00343	-.01941	.02354	.00250	.00071
#2	-.00074	.35402	-.00058	.00026	-.00166	-.05959	.02220	.00145	.00143
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3034.8	Y_3774 Cts/S 52106.	360.073 {94}	377.433 {89}	5266.2	182.	9.0	1.3
#1	3035.0	51977.	5272.6						
#2	3034.6	52235.	5259.9						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 14:50:18 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -0.00615	Al3092 ppm 49.070	As1890 ppm -0.00616	B_2089 ppm .00514	Ba4554 ppm .00057	Be3130 ppm .00027	Bi2230 ppm 1.0280	Ca3179 ppm .03132	Cd2288 ppm -.00040	Co2286 ppm -.00029	Cr2055 ppm .00026
#1	-.00589	49.182	-.00438	.00494	.00039	.00024	1.0298	.03204	-.00036	-.00014	.00045
#2	-.00642	48.959	-.00794	.00533	.00075	.00031	1.0261	.03060	-.00044	-.00043	.00006
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00016	Fe2714 ppm 47.755	K_7664 ppm .69603	Li6707 ppm .00108	Mg2790 ppm .05909	Mn2576 ppm -.00170	Mo2020 ppm -.00097	Na8183 ppm 250.18	Ni2316 ppm .00296	P_1782 ppm .00453	Pb2203 ppm -.00082
#1	.00029	47.742	.71772	.00020	.06352	-.00172	-.00104	251.47	.00294	.00326	-.00148
#2	.00002	47.768	.67434	.00196	.05466	-.00167	-.00091	248.90	.00299	.00581	-.00017
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 4.9691	Sb2068 ppm -.00986	Se1960 ppm .00927	Si2881 ppm .00576	SiO2 ppm .01232	Sn1899 ppm -.00208	Sr4077 ppm .00047	Th2837 ppm 5.0918	Ti3349 ppm -.01222	TI1908 ppm .00338	U_3701 ppm W 10.571
#1	4.9920	-.01049	0.1335	-.00094	-.00201	-.00198	.00042	5.1023	-.01256	.00335	10.551
#2	4.9462	-.00923	.00520	.01246	.02666	-.00217	.00052	5.0813	-.01188	.00341	10.592
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00213	Zn2062 ppm -.00097	Zr3391 ppm -.14610								
#1	.00227	-.00044	-.14660								
#2	.00198	-.00150	-.14559								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3032.8	Y_3600 Cts/S 51155.	Y_3774 Cts/S 5367.5								
#1	3032.5	51979.	5303.9								
#2	3033.1	50331.	5431.1								

Sample Name: CCV-3290307 Acquired: 5/28/2015 14:52:50 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.48668	.52172	1.0034	.52479	.46682	.45637	-.00236	4.6444	.52004	.50221	.47060	.48682
Stddev	.00069	.00138	.0035	.00287	.00049	.00151	.00044	.0071	.00040	.00085	.00113	.00077
%RSD	.14090	.26409	.35175	.54723	.10555	.33114	18.602	.15196	.07618	.17016	.24067	.15736

#1	.48717	.52074	1.0009	.52276	.46647	.45530	-.00205	4.6394	.52032	.50160	.46980	.48736
#2	.48620	.52269	1.0059	.52682	.46716	.45744	-.00267	4.6494	.51976	.50281	.47141	.48628

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3257	48.674	.96566	19.639	.51894	.49539	F 5.8264	.50356	1.0389	1.0024	.02332	1.0199
Stddev	.0175	.089	.00414	.053	.00059	.00023	.0149	.00109	.0007	.0002	.01202	.0001
%RSD	.75021	.18219	.42859	.26884	.11435	.04617	.25520	.21565	.06820	.01657	51.533	.00772

#1	2.3134	48.611	.96273	19.602	.51852	.49523	5.8369	.50279	1.0394	1.0023	.01482	1.0200
#2	2.3380	48.737	.96858	19.676	.51936	.49555	5.8159	.50432	1.0384	1.0025	.03182	1.0199

Check ? Value Range	Chk Pass	Chk Fail 5.0000	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
							10.490%					

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0164	4.7395	10.142	1.0023	.46982	-.00251	.50462	1.0283	-.03462	.52915	.52660	.45803
Stddev	.0039	.0134	.029	.0001	.00078	.00029	.00092	.0001	.01423	.00011	.00104	.00122

#1	1.0192	4.7300	10.122	1.0024	.46927	-.00231	.50397	1.0284	-.04469	.52923	.52734	.45717
#2	1.0136	4.7489	10.163	1.0022	.47038	-.00272	.50528	1.0282	-.02456	.52907	.52586	.45890

Check ? Value Range	Chk Pass	None	Chk Pass									
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3059.9	51711.	5234.1									
Stddev	2.3	115.	14.2									
%RSD	.07546	.22279	.27113									
#1	3061.5	51793.	5244.2									
#2	3058.2	51630.	5224.1									

Sample Name: CCB Acquired: 5/28/2015 14:55:15 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00016	-.00045	-.00086	.00275	-.00012	.00014	-.00348	.00178	-.00015	.00016	-.00002	-.00078
Stddev	.00045	.00049	.00481	.00035	.00022	.00002	.00072	.00098	.00015	.00000	.00013	.00006
%RSD	270.21	109.74	561.59	12.811	183.66	13.890	20.639	54.921	100.06	2.9820	604.25	8.1595
#1												
#2												

Check ? High Limit Low Limit	Chk Pass											

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	-.00003	.32789	.00186	.00619	.00012	.00041	F .85135	.00057	-.00103	-.00101	.01627	.00167
Stddev	.00196	.06548	.00125	.00058	.00010	.00011	.01806	.00017	.00063	.00039	.00640	.00197
%RSD	6965.9	19.970	67.366	9.4278	84.064	26.447	2.1218	29.332	61.529	38.569	39.328	117.41
#1												
#2												

Check ? High Limit Low Limit	Chk Pass	Chk Fail .50000 -.50000	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00328	.01150	.02460	-.00032	.00022	-.00030	.00002	.00008	.00573	.00002	.00103	-.00197
Stddev	.00323	.01662	.03557	.00014	.00017	.00017	.00015	.000139	.01359	.00038	.00069	.00065
%RSD	98.348	144.57	144.57	43.164	77.260	56.074	745.44	1744.6	237.14	2477.2	67.519	32.893
#1												
#2												

Check ? High Limit Low Limit	Chk Pass											

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3079.2	53191.	5257.8									
Stddev	31.2	69.	58.4									
%RSD	1.0140	.13048	1.1099									
#1	3101.3	53240.	5216.6									
#2	3057.1	53142.	5299.1									

Sample Name: CCVL3296658 Acquired: 5/28/2015 14:57:31 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00034	F -.00107	F -.00743	F .00320	F .00200	F .00036	F -.00290	F .04034	F .00004	F -.00023	F .00001
Stddev	.00104	.00006	.00072	.00036	.00315	.00031	.00427	.05704	.00012	.00019	.00012
%RSD	301.51	5.8476	9.6566	11.395	157.90	86.112	146.90	141.38	281.04	83.019	2341.3
#1	-.00039	-.00112	-.00793	.00346	.00423	.00058	-.00592	.08067	-.00004	-.00010	-.00008
#2	.00108	-.00103	-.00692	.00294	-.00023	.00014	.00011	.00001	.00012	-.00037	.00009
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00054	F .02227	F .99126	F .00402	F .00762	F .00002	F -.00004	.92573	F .00054	F -.00346	F -.00157
Stddev	.00038	.03205	.92581	.00249	.00077	.00001	.00008	.33544	.00049	.00145	.00068
%RSD	71.445	143.94	93.397	61.863	10.153	43.787	212.33	36.235	90.735	42.031	43.199
#1	-.00027	.04493	1.6459	.00578	.00816	.00001	-.00009	1.1629	.00020	-.00448	-.00205
#2	-.00081	-.00040	.33661	.00226	.00707	.00003	.00002	.68854	.00089	-.00243	-.00109
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Pass	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	.01570	F .00020	F -.00063	F .11176	F .23916	F .00044	F .00219	F .00089	F -.00019	F .00238	F -.00725
Stddev	.00156	.00260	.00013	.16680	.35695	.00062	.00295	.00135	.00013	.00038	.03278
%RSD	9.9576	1268.6	20.155	149.25	149.25	140.13	135.08	152.68	68.277	15.912	452.31
#1	.01459	-.00163	-.00072	.22970	.49157	.00000	.00427	-.00007	-.00010	.00212	.01593
#2	.01680	.00204	-.00054	-.00619	-.01324	.00088	.00010	.00184	-.00028	.00265	-.03043
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F .00020	F .00020	F .00380								
Stddev	.00004	.00028	.00105								
%RSD	20.539	140.25	27.761								
#1	.00023	.00000	.00454								
#2	.00017	.00039	.00305								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243	Y_3600	Y_3774								
Avg	Cts/S	Cts/S	Cts/S								
Stddev	3093.9	53316.	5307.0								
%RSD	11.3	49.	50.2								
#1	.36635	.09271	.94614								
#2	3085.8	53281.	5342.5								
	3101.9	53351.	5271.5								

Sample Name: 280-69615-E-2-A Acquired: 5/28/2015 14:59:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00026	As1890 ppm .07308	B_2089 ppm .01334	Ba4554 ppm .03800	Be3130 ppm .08874	Bi2230 ppm .00017	Ca3179 ppm .00509	Cd2288 ppm 42.114
#1	-.00013	.07233	.00953	.03807	.08786	.00016	-.00458	41.626	.00019
#2	-.00039	.07384	.01715	.03793	.08961	.00018	-.00560	42.602	.00036
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00011	Cu3247 ppm .00118	Fe2599 ppm .00053	K_7664 ppm .50733	Li6707 ppm 2.8479	Mg2790 ppm .00426	Mn2576 ppm 6.2170	Mo2020 ppm 1.0534
#1	-.00026	.00129	.00041	.50791	2.8221	.00433	6.3044	1.0550	-.00110
#2	.00003	.00108	.00065	.50675	2.8737	.00418	6.1296	1.0518	-.00097
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 25.345	P_1782 ppm .00330	Pb2203 ppm 1.0154	S_1820 ppm .00146	Sb2068 ppm 2.2027	Se1960 ppm .00090	Si2881 ppm .00325	SiO2 ppm 13.236
#1	25.435	.00327	1.0069	.00103	2.1879	.00053	.00147	13.201	28.250
#2	25.256	.00333	1.0239	.00190	2.2176	.00128	.00503	13.270	28.398
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00133	Th2837 ppm .54410	Ti3349 ppm .00047	Tl1908 ppm .00469	U_3701 ppm -.00617	V_2924 ppm -.03919	Zn2062 ppm .00315	Zr3391 ppm .00226
#1	.00074	.53729	.00076	.00470	-.00669	-.03834	.00301	.00237	.00025
#2	.00192	.55092	.00018	.00467	-.00565	-.04003	.00329	.00215	.00090
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3108.3	Y_3774 Cts/S 52048.	377.433 {89}					
#1	3086.1	51336.	5106.	5210.9					
#2	3130.6	52759.	57.4	5129.7					

Sample Name: 280-69615-C-3-A Acquired: 5/28/2015 15:02:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00054	.03366	.00062	.04105	.04514	.00014	-.00448	26.692	.00009
#2	.00044	.03348	-.00416	.04230	.04499	-.00002	-.00639	26.559	.00067
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00061	.00765	.00069	.06411	1.1340	.00210	3.0262	.00126	.00036
#2	-.00021	.00799	.00076	.07141	.31840	.26603	1.0725	1.2610	2.8051
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	24.119	.00251	.02831	.00070	4.4204	.00339	.00118	13.868	29.678
#2	23.876	.00210	.02612	-.00090	4.4769	.00533	.00206	13.928	29.805
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00069	.41683	.00103	.00187	-.00384	-.02383	.02475	.00192	.00042
#2	-.00003	.41433	.00086	.00235	-.00275	-.01675	.02494	.00130	.00255
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3134.2	53921.	5464.5						
#2	3135.2	54052.	5507.8						

Sample Name: 280-69615-C-4-A Acquired: 5/28/2015 15:04:56 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.01049	.00212	.03118	.05838	.00015	-.00347	24.483	.00023
Stddev	.00098	.00024	.00162	.00051	.00055	.00012	.00087	.029	.00007
%RSD	171.78	2.2570	76.372	1.6359	.94754	80.706	24.996	.11763	29.775
#1	-.00012	.01066	.00098	.03154	.05877	.00006	-.00409	24.503	.00027
#2	.00126	.01032	.00327	.03082	.05798	.00024	-.00286	24.463	.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.01196	.00007	.01531	1.1224	.00368	3.6168	.00036	.00037
Stddev	.00011	.00036	.00009	.00156	.0700	.00027	.0341	.00001	.00004
%RSD	22.630	3.0232	133.61	10.205	6.2329	7.2578	.94179	3.5499	10.810
#1	-.00055	.01222	.00013	.01420	1.0729	.00349	3.5927	.00035	.00034
#2	-.00040	.01171	.00000	.01641	1.1719	.00387	3.6409	.00037	.00040
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.014	.00191	.01852	-.00005	4.4604	.00048	.00305	13.463	28.811
Stddev	.199	.00025	.00237	.00006	.0102	.00358	.00562	.108	.230
%RSD	.94750	13.227	12.783	131.26	.22795	738.33	184.29	.79898	.79898
#1	20.873	.00173	.02020	-.00009	4.4532	.00301	.00702	13.387	28.648
#2	21.155	.00209	.01685	.00000	4.4676	-.00205	-.00092	13.539	28.974
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.36214	.00094	.00042	-.00301	-.03964	.01998	.00102	.00087
Stddev	.00151	.00052	.00082	.00003	.00148	.00299	.00004	.00048	.00128
%RSD	186.73	.14373	86.951	7.9096	48.942	7.5513	.17514	46.895	146.14
#1	.00188	.36251	.00036	.00044	-.00406	-.04176	.02001	.00068	.00178
#2	-.00026	.36177	.00153	.00040	-.00197	-.03752	.01996	.00136	-.00003
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3109.3	53042.	5556.3						
Stddev	8.5	29.	33.8						
%RSD	.27389	.05553	.60786						
#1	3115.3	53021.	5532.5						
#2	3103.3	53062.	5580.2						

Sample Name: 280-69615-C-5-A Acquired: 5/28/2015 15:07:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.02657	-.00337	.04073	.03440	.00016	-.00387	21.159	.00028
Stddev	.00002	.00048	.00407	.00087	.00030	.00008	.00145	.120	.00024
%RSD	13.406	1.8033	120.84	2.1249	.88202	51.856	37.344	.56856	84.261
#1	.00015	.02623	-.00049	.04134	.03461	.00010	-.00490	21.244	.00011
#2	.00018	.02690	-.00625	.04011	.03418	.00022	-.00285	21.074	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.00847	.00009	.04501	1.4859	.00427	3.2798	.01779	.00088
Stddev	.00028	.00029	.00066	.00024	.0541	.00166	.0308	.00002	.00018
%RSD	57.335	3.4431	740.98	.52245	3.6439	38.912	.93758	.09735	20.221
#1	-.00029	.00826	.00055	.04484	1.4476	.00545	3.3015	.01780	.00101
#2	-.00069	.00867	-.00038	.04518	1.5242	.00310	3.2581	.01777	.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.321	.00207	.02971	-.00186	4.2949	.00369	.00599	13.199	28.246
Stddev	.019	.00012	.00231	.00070	.0087	.00007	.00193	.046	.099
%RSD	.07929	5.9457	7.7755	37.494	.20241	1.9327	32.175	.35171	.35171
#1	24.307	.00216	.03134	-.00235	4.3011	.00363	.00735	13.166	28.176
#2	24.335	.00199	.02807	-.00136	4.2888	.00374	.00463	13.232	28.316
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.32265	.00094	.00094	-.00266	-.00697	.01636	.00217	.00137
Stddev	.00096	.00219	.00176	.00020	.00091	.00670	.00040	.00002	.00153
%RSD	519.91	.67985	186.75	21.799	34.238	96.005	2.4346	.91895	112.24
#1	.00086	.32420	.00218	.00108	-.00331	-.01171	.01664	.00218	.00028
#2	-.00049	.32110	-.00030	.00079	-.00202	-.00224	.01608	.00215	.00245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3151.4	53305.	5408.6						
Stddev	13.8	38.	66.7						
%RSD	.43790	.07041	1.2338						
#1	3141.7	53279.	5361.4						
#2	3161.2	53332.	5455.7						

Sample Name: 280-69615-C-7-A Acquired: 5/28/2015 15:10:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.01655	.00154	.04080	.03433	.00012	-.00436	20.664	.00020
Stddev	.00032	.00058	.00056	.00033	.00030	.00001	.00025	.176	.00018
%RSD	306.29	3.5188	36.633	.81579	.88215	7.9246	5.7376	.84941	90.270
#1	-.00033	.01614	.00194	.04056	.03455	.00012	-.00453	20.539	.00007
#2	.00012	.01696	.00114	.04103	.03412	.00013	-.00418	20.788	.00032
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	.00816	-.00011	.03628	1.3788	.00495	3.1898	.00437	.00053
Stddev	.00017	.00009	.00029	.00176	.0027	.00026	.0490	.00001	.00032
%RSD	42.307	1.0686	258.19	4.8631	.19581	5.2595	1.5364	.34155	60.167
#1	-.00029	.00822	-.00032	.03503	1.3807	.00477	3.2245	.00436	.00076
#2	-.00053	.00810	.00009	.03753	1.3769	.00514	3.1552	.00438	.00031
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.985	.00161	.02471	-.00095	4.2576	-.00162	.00114	12.946	27.703
Stddev	.558	.00045	.00084	.00108	.0084	.00168	.00419	.048	.104
%RSD	2.3256	27.953	3.4165	113.56	.19696	103.49	366.91	.37423	.37423
#1	23.590	.00193	.02412	-.00019	4.2635	-.00281	.00410	12.911	27.630
#2	24.379	.00129	.02531	-.00171	4.2516	-.00043	-.00182	12.980	27.777
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.31774	.00031	.00078	-.00220	-.03137	.01643	.00267	.00145
Stddev	.00089	.00263	.00073	.00011	.00062	.03035	.00007	.00052	.00035
%RSD	1941.0	.82893	236.62	14.561	28.116	96.753	.42164	19.485	23.924
#1	-.00068	.31588	-.00021	.00070	-.00176	-.05282	.01648	.00304	.00170
#2	.00058	.31961	.00082	.00086	-.00263	-.00991	.01638	.00230	.00121
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3141.6	53393.	5608.4						
Stddev	2.2	213.	6.9						
%RSD	.07160	.39983	.12217						
#1	3140.0	53242.	5603.6						
#2	3143.2	53544.	5613.3						

Sample Name: 280-69615-E-8-A Acquired: 5/28/2015 15:12:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278892 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	.01900	-.00253	.02860	.04300	.00008	-.00546	26.050	.00013
Stddev	.00007	.00056	.00183	.00050	.00005	.00004	.00351	.114	.00022
%RSD	13.161	2.9349	72.488	1.7609	.11286	50.558	64.253	.43726	170.51
#1	.00056	.01939	-.00123	.02825	.04303	.00005	-.00298	25.970	-.00003
#2	.00046	.01860	-.00383	.02896	.04296	.00011	-.00794	26.131	.00029
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	.01065	.00043	.04115	1.0390	.00342	4.0395	.00523	.00025
Stddev	.00039	.00010	.00034	.00222	.0718	.00030	.0032	.00004	.00006
%RSD	87.863	.93597	78.658	5.4044	6.9074	8.8352	.07789	.71044	22.698
#1	-.00017	.01072	.00019	.04272	1.0897	.00321	4.0417	.00525	.00021
#2	-.00072	.01058	.00067	.03958	.98825	.00363	4.0372	.00520	.00029
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.218	.00236	.03884	-.00059	4.2927	.00231	.00183	12.880	27.563
Stddev	.518	.00025	.00349	.00050	.0220	.00074	.00282	.117	.251
%RSD	2.5636	10.508	8.9904	83.224	.51174	31.987	154.22	.90937	.90937
#1	19.852	.00253	.03637	-.00095	4.2772	.00283	-.00017	12.797	27.385
#2	20.585	.00218	.04130	-.00024	4.3082	.00179	.00383	12.963	27.740
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	.35561	.00119	.00085	-.00236	-.03903	.01769	.00273	.00019
Stddev	.00006	.00170	.00059	.00025	.00010	.01228	.00019	.00030	.00215
%RSD	13.394	.47946	49.325	29.109	4.2319	31.457	1.0918	10.933	1103.0
#1	.00049	.35440	.00161	.00103	-.00229	-.04771	.01783	.00252	-.00132
#2	.00040	.35681	.00078	.00068	-.00243	-.03035	.01756	.00294	.00171
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3153.2	52506.	5402.5						
Stddev	10.8	273.	.2						
%RSD	.34226	.51990	.00315						
#1	3160.8	52699.	5402.4						
#2	3145.6	52313.	5402.6						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 15:15:13 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00609	Al3092 ppm 48.650	As1890 ppm -.00125	B_2089 ppm .00149	Ba4554 ppm .00046	Be3130 ppm .00005	Bi2230 ppm 1.0298	Ca3179 ppm .02600	Cd2288 ppm .00001	Co2286 ppm -.00054	Cr2055 ppm .00027
#1	-.00626	48.480	-.00103	.00073	.00073	-.00004	1.0303	.02676	.00018	-.00040	.00025
#2	-.00592	48.820	-.00146	.00224	.00018	.00014	1.0292	.02523	-.00017	-.00068	.00029
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00027	Fe2714 ppm 48.015	K_7664 ppm .19723	Li6707 ppm .00196	Mg2790 ppm .05954	Mn2576 ppm -.00157	Mo2020 ppm -.00073	Na8183 ppm 248.23	Ni2316 ppm .00231	P_1782 ppm .00286	Pb2203 ppm -.00258
#1	.00010	47.731	.18086	.00110	.05905	-.00164	-.00089	247.88	.00244	.00554	-.00247
#2	-.00064	48.299	.21361	.00283	.06003	-.00150	-.00056	248.59	.00217	.00018	-.00270
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0042	Sb2068 ppm -.01461	Se1960 ppm .01389	Si2881 ppm -.00731	SiO2 ppm -.01563	Sn1899 ppm -.00139	Sr4077 ppm .00036	Th2837 ppm 5.0644	Ti3349 ppm -.01219	TI1908 ppm .00200	U_3701 ppm W 10.557
#1	5.0217	-.01520	0.1224	-.01821	-.03897	-.00036	.00028	5.0554	-.01228	.00321	10.548
#2	4.9868	-.01401	.01555	.00360	.00770	-.00242	.00044	5.0735	-.01210	.00079	10.566
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00265	Zn2062 ppm -.00082	Zr3391 ppm -.14109								
#1	.00304	-.00145	-.13998								
#2	.00227	-.00020	-.14220								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3101.6	Y_3600 Cts/S 51896.	Y_3774 Cts/S 5368.2								
#1	3103.9	51716.	5370.7								
#2	3099.4	52076.	5365.7								

Sample Name: CCV-3290307 Acquired: 5/28/2015 15:17:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48131	.51909	.99237	.51412	.46414	.45328	-.00173	4.5970	.51380	.49719	.47092	.48260	2.3038
Stddev	.00210	.00042	.01047	.00143	.00255	.00306	.00214	.0267	.00070	.00095	.00013	.00289	.0042
%RSD	.43567	.08175	1.0551	.27830	.54924	.67453	124.08	.58095	.13600	.19054	.02811	.59974	.18177
#1	.48279	.51939	.98497	.51310	.46595	.45544	-.00021	4.6159	.51430	.49652	.47102	.48465	2.3067
#2	.47983	.51879	.99978	.51513	.46234	.45112	-.00324	4.5781	.51331	.49785	.47083	.48056	2.3008

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.220	.95474	19.424	.51164	.49010	5.1503	.49753	1.0279	1.0012	.00711	1.0062	1.0014	4.7112
Stddev	.243	.00213	.037	.00152	.00056	.0534	.00057	.0017	.0035	.00114	.0022	.0034	.0018
%RSD	.50307	.22305	.19190	.29741	.11504	1.0372	.11513	.16776	.34718	15.978	.21420	.33996	.03882
#1	48.391	.95625	19.450	.51271	.48970	5.1881	.49713	1.0292	1.0037	.00791	1.0047	1.0038	4.7099
#2	48.048	.95324	19.397	.51056	.49050	5.1125	.49794	1.0267	.99875	.00631	1.0077	.99902	4.7125

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.082	.99497	.46630	-.00367	.49876	1.0194	-.01520	.52020	.51602	.45488
Stddev	.004	.00140	.00260	.00198	.00177	.0035	.01655	.00111	.00600	.00018
%RSD	.03882	.14070	.55677	53.979	.35420	.34566	108.85	.21429	1.1621	.04013
#1	10.079	.99398	.46814	-.00227	.50001	1.0169	-.02690	.52099	.52026	.45476
#2	10.085	.99596	.46446	-.00507	.49751	1.0219	-.00350	.51941	.51178	.45501

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass								
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3094.1	52415.	5371.9										
Stddev	6.9	134.	52.0										
%RSD	.22315	.25488	.96761										
#1	3099.0	52320.	5335.1										
#2	3089.2	52509.	5408.7										

Sample Name: CCB Acquired: 5/28/2015 15:20:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00036	-.00094	-.00190	.00199	-.00002	.00003	-.00483	-.00089	-.00015	-.00023	-.00007	-.00055	.00058
Stddev	.00040	.00004	.00144	.00036	.00023	.00004	.00115	.00514	.00014	.00022	.00015	.00036	.00061
%RSD	109.38	3.9639	75.616	18.108	1330.5	120.02	23.777	574.65	93.602	94.336	206.39	64.649	105.34
#1	.00008	-.00097	-.00088	.00173	-.00018	.00006	-.00402	-.00453	-.00025	-.00008	.00003	-.00030	.00015
#2	.00064	-.00091	-.00292	.00224	.00015	.00000	-.00564	.00274	-.00005	-.00038	-.00017	-.00080	.00101

Check ?
High Limit
Low Limit

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.12799	.00282	.00099	.00006	.00013	.28377	-.00007	-.00257	-.00215	.00757	.00154	.00203	.02436
Stddev	.02610	.00246	.00006	.00000	.00049	.00056	.00050	.00115	.00050	.00188	.00036	.00436	.00496
%RSD	20.389	87.469	5.7742	3.3588	366.37	.19564	740.29	44.770	23.157	24.768	23.664	214.93	20.347
#1	.10954	.00107	.00095	.00006	-.00021	.28416	-.00042	-.00176	-.00250	.00624	.00180	.00511	.02086
#2	.14644	.00456	.00103	.00006	.00048	.28338	.00029	-.00338	-.00179	.00890	.00128	-.00105	.02787

Check ?
High Limit
Low Limit

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.05213	-.00057	.00005	.00022	.00013	.00104	-.00947	-.00008	-.00029	.00207
Stddev	.01061	.00014	.00004	.00058	.00042	.00208	.00301	.00044	.00113	.00057
%RSD	20.347	25.082	88.209	265.55	321.22	201.08	31.799	580.60	390.47	27.614
#1	.04463	-.00047	.00002	.00063	-.00016	.00251	-.00734	.00024	.00051	.00247
#2	.05964	-.00067	.00008	-.00019	.00042	-.00044	-.01160	-.00039	-.00109	.00167

Check ?
High Limit
Low Limit

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3103.4	52254.	5158.8										
Stddev	14.8	228.	82.7										
%RSD	.47669	.43645	1.6038										
#1	3092.9	52093.	5100.3										
#2	3113.8	52415.	5217.3										

Sample Name: CCVL3296658 Acquired: 5/28/2015 15:22:26 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 .00950	Be3130 .00101	Bi2230 ppm	Ca3179 .20000	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	
Avg	F .00014	F -.00120	F -.00531	F .00083			F -.00423		F .00012	F -.00013	F -.00008	
Stddev	.00133	.00050	.00001	.00045	.00003	.00002	.00161	.00274	.00018	.00019	.00012	
%RSD	958.58	41.285	.24564	54.793	.33370	1.6415	37.977	1.3694	150.43	148.17	155.17	
#1	.00108	-.00085	-.00530	.00051	.00952	.00100	-.00537	.19806	-.00001	.00001	-.00016	
#2	-.00080	-.00155	-.00532	.00115	.00948	.00102	-.00309	.20193	.00024	-.00026	.00001	
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Pass	Chk Pass	Chk Fail .10000 -30.000%	Chk Pass	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%	
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	
Avg	F -.00036	.09941	3.1839	.01087	F .00461	F .00015	F .00009	F 1.3062	F -.00006	F -.00311	F -.00187	
Stddev	.00042	.00167	.0196	.00094	.00760	.00029	.00007	.0011	.00017	.00323	.00066	
%RSD	117.56	1.6814	.61409	8.6866	164.77	192.58	73.483	.08652	280.85	103.88	35.485	
#1	-.00066	.09823	3.1700	.01020	.00999	.00035	.00004	1.3054	-.00018	-.00082	-.00234	
#2	-.00006	.10060	3.1977	.01153	-.00076	-.00005	.00014	1.3070	.00006	-.00539	-.00140	
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Pass	Chk Pass	Chk Pass	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .00000 30.000%	Chk Fail .04000 -30.000%	Chk Fail .00000 -30.000%	Chk Fail .00900 -30.000%	Chk Fail .00000 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	
Avg	.00507	F .00090	F .00223	.49518	1.0597	F -.00006	.00973	F .00095	F .00033	F .00234	F -.01692	
Stddev	.00070	.00087	.00221	.00841	.0180	.00029	.00013	.00012	.00037	.00100	.00668	
%RSD	13.754	97.125	99.247	1.6982	1.6982	476.19	1.3135	12.636	111.29	42.529	39.489	
#1	.00458	.00151	.00380	.50113	1.0724	-.00027	.00964	.00104	.00059	.00164	-.01219	
#2	.00557	.00028	.00067	.48923	1.0470	.00014	.00982	.00087	.00007	.00305	-.02164	
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Pass	Chk Pass	Chk Fail .10000 -30.000%	Chk Pass	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%	
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm									
Avg	F .00015	F .00056	.01422									
Stddev	.00007	.00057	.00072									
%RSD	47.682	101.94	5.0427									
#1	.00020	.00096	.01371									
#2	.00010	.00015	.01473									
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Pass									
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3203.4	55407.	5219.6									
Stddev	46.9	14.	13.5									
%RSD	1.4655	.02589	.25880									
#1	3236.6	55418.	5229.2									
#2	3170.2	55397.	5210.1									

Sample Name: MB 280-278164/1-A Acquired: 5/28/2015 15:25:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/22 Custom ID2: Custom ID3:

Comment: 278164 SOIL 6010C LOQV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00025	.00399	-.00382	.00362	.00131	.00004	-.00716	.18782	-.00002
#2	.00020	.00366	-.00586	.00608	.00117	.00012	-.00650	.19100	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00020	.00028	.00048	.05326	.10125	.00356	.06757	.00040	.00000
#2	-.00073	.00057	.00110	.05132	.10385	.00057	.06922	.00042	.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn .05000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.36414	.00031	.00728	.00025	.01820	-.00026	-.00491	.03226	.06903
#2	.33876	.00059	.00805	.00022	.00919	.00368	-.00608	.03694	.07904
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00907	.00049	.00196	-.00024	.00014	-.02694	-.00043	.00537	-.00198
#2	.00922	.00036	.00034	.00018	.00234	-.04741	-.00031	.00561	.00144
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3175.3	54973.	5277.2						
#2	3161.0	54861.	5444.0						

Sample Name: 280-69355-A-1-A LOQV Acquired: 5/28/2015 15:27:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278164 SOIL 6010C LOQV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00015	-.00149	-.00073	.00169	.00441	.00046	-.00335	.16042	.00002
#2	.00071	-.00129	-.00063	.00124	.00008	.00013	-.00600	-.00372	.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00018	-.00031	-.00039	.05034	1.4072	.00463	.00565	-.00003	-.00017
#2	.00017	-.00035	-.00050	.00058	.11328	.00291	.00667	.00006	.00045
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.72659	.00027	.00060	-.00122	-.00388	-.00017	.00108	.28657	.61326
#2	.23887	.00031	.00030	-.00162	.00089	.00256	-.00175	.01696	.03630
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00077	.00437	-.00125	.00063	-.00006	.02446	-.00065	.00025	.00727
#2	-.00030	-.00001	.00105	.00028	.00222	-.04974	-.00059	.00027	.00210
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3273.6	56319.	5592.4						
#2	3307.6	56559.	5679.4						

Sample Name: MB 280-278162/1-A Acquired: 5/28/2015 15:29:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/22 Custom ID2: Custom ID3:

Comment: 278162 6010C MDLV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm -.00017	As1890 ppm -.00102	B_2089 ppm -.00581	Ba4554 ppm -.00002	Be3130 ppm .00006	Bi2230 ppm -.00465	Ca3179 ppm .00129	Cd2288 ppm .00045
#1	-.00088	-.00120	-.00597	-.00040	.00005	.00012	-.00401	.00082	.00028
#2	.00055	-.00084	-.00564	.00148	-.00010	.00000	-.00529	.00175	.00062
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00020	Cu3247 ppm -.00014	Fe2599 ppm -.00037	K_7664 ppm .00096	Li6707 ppm .11160	Mg2790 ppm .00059	Mn2576 ppm -.00072	Mo2020 ppm -.00001
#1	-.00011	-.00026	-.00024	.00075	.11511	.00139	-.00132	-.00001	-.00018
#2	-.00028	-.00003	-.00051	.00117	.10809	-.00021	-.00012	.00000	.00029
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .25276	P_1782 ppm .00008	Pb2203 ppm -.00148	S_1820 ppm -.00104	Sb2068 ppm .00816	Se1960 ppm .00121	Si2881 ppm .00350	SiO2 ppm .01837
#1	.24292	.00017	-.00123	-.00087	.01020	.00210	.00424	.03177	.06799
#2	.26259	-.00001	-.00172	-.00122	.00612	.00032	.00276	.00497	.01063
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00087	Th2837 ppm .00002	Ti3349 ppm .00003	Tl1908 ppm -.00006	U_3701 ppm .00208	V_2924 ppm -.01699	Zn2062 ppm -.00035	Zr3391 ppm -.00018
#1	.00033	-.00001	.00148	-.00007	.00300	-.03816	-.00028	-.00023	.00060
#2	.00140	.00005	-.00143	-.00005	.00116	.00417	-.00043	-.00013	-.00122
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3226.6	Y_3774 Cts/S 55720.						
#1	3231.0	56045.	5608.8						
#2	3222.2	55394.	5481.4						

Sample Name: 280-69332-A-8-A MDLV Acquired: 5/28/2015 15:31:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278162 6010C MDLV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00373	.07630	.00955	.01764	.00202	.00171	.01875	.12606	.00220
#2	.00353	.07674	.01161	.01687	.00212	.00174	.01709	.13592	.00213
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00407	.00257	.00501	.08459	.97918	.01074	.04090	.00125	.01184
#2	.00444	.00267	.00516	.08491	1.0645	.00798	.03904	.00122	.01178
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.60248	.00482	.04968	.00944	.04178	.01457	.02004	.14414	.30847
#2	.00642	.00037	.00135	.00044	.00575	.00061	.00133	.00340	.00728
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.01897	.00115	.01746	.00226	.02374	-.00582	.00350	.01558	.00802
#2	.02147	.00119	.01818	.00213	.02069	.02647	.00368	.01440	.00716
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3066.5	53277.	5381.8						
#2	3058.2	53609.	5350.4						

Sample Name: 280-69332-A-9-A MDLV Acquired: 5/28/2015 15:34:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278162 6010C MDLV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00373	.08068	.00535	.01772	.00168	.00179	.01941	.12890	.00209
#2	.00363	.08051	.00644	.01676	.00191	.00180	.02218	.13210	.00236
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00432	.00227	.00470	.08815	.99890	.01197	.03953	.00111	.01185
#2	.00442	.00236	.00431	.08828	1.0603	.01230	.04442	.00113	.01183
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.61495	.00470	.04683	.00877	.04308	.01645	.02403	.13984	.29926
#2	.60166	.00507	.04670	.00736	.03852	.01393	.02131	.12733	.27249
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.02063	.00107	.01645	.00248	.02015	-.05096	.00322	.01633	.00753
#2	.02086	.00113	.01440	.00247	.01859	-.02585	.00401	.01679	.01032
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3066.1	52315.	5340.9						
#2	3072.0	52783.	5423.3						

Sample Name: 69332-A-10-A LOQV Acquired: 5/28/2015 15:37:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278162 6010C LOQV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .01871	As1890 ppm .31499	B_2089 ppm .02098	Ba4554 ppm .10136	Be3130 ppm .00962	Bi2230 ppm .00158	Ca3179 ppm .01124	Cd2288 ppm .95402	
#1	.01839	.31387	.02391	.10163	.00961	.00150	-.01282	.95173	.00511	
#2	.01902	.31611	.01805	.10109	.00963	.00166	-.00967	.95632	.00506	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .01470	Cu3247 ppm .01374	Fe2599 ppm .01441	K_7664 ppm .09437	Li6707 ppm 3.0688	Mg2790 ppm .01621	Mn2576 ppm .48196	Mo2020 ppm .01001	
#1	.01460	.01362	.01476	.09340	3.0820	.01590	.48842	.00995	.03035	
#2	.01479	.01386	.01407	.09533	3.0555	.01653	.47549	.01007	.03024	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 5.2016	P_1782 ppm .04057	Pb2203 ppm W 2.9594	S_1820 ppm .01404	Sb2068 ppm .00169	Se1960 ppm .02260	Si2881 ppm .02436	SiO2 ppm .95510	
#1	5.2005	.04062	2.9599	.01402	-.00179	.01954	.02408	.95578	2.0454	
#2	5.2026	.04052	2.9589	.01406	.00517	.02566	.02464	.95441	2.0424	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .10325	Th2837 ppm .00973	Ti3349 ppm .04160	Tl1908 ppm .00981	U_3701 ppm .04414	V_2924 ppm -.02421	Zn2062 ppm .01585	Zr3391 ppm .15202	
#1	.10266	.00984	.04207	.01006	.04544	-.02746	.01625	.15181	.01384	
#2	.10384	.00961	.04114	.00955	.04285	-.02096	.01546	.15223	.01204	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3022.8	Y_3774 Cts/S 51999.	377.433 {89}						
#1	3017.4	51857.	5199.7							
#2	3028.3	52141.	5191.5							

Sample Name: MB 280-278146/1-A Acquired: 5/28/2015 15:39:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/22 Custom ID2: Custom ID3:

Comment: 278146 6010C LOQV

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.00159	-.00028	.00109	.00020	.00005	-.00324	.00614	.00009
Stddev	.00069	.00058	.00571	.00158	.00005	.00004	.00080	.00015	.00045
%RSD	151.46	36.631	2063.2	144.90	24.875	82.842	24.649	2.4246	517.89
#1	.00094	.00200	.00376	-.00003	.00024	.00008	-.00380	.00624	.00041
#2	-.00003	.00118	-.00432	.00220	.00016	.00002	-.00267	.00603	-.00023
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.00030	-.00050	.00004	.08937	.00189	.00422	.00011	-.00017
Stddev	.00007	.00013	.00032	.00135	.02823	.00123	.00351	.00003	.00016
%RSD	27.363	41.582	64.511	3688.6	31.590	64.980	83.198	22.210	90.144
#1	-.00030	.00021	-.00027	.00099	.10933	.00275	.00174	.00010	-.00006
#2	-.00020	.00039	-.00072	-.00092	.06941	.00102	.00671	.00013	-.00029
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21452	.00007	-.00196	-.00105	.00628	.00171	.00399	.00409	.00876
Stddev	.01003	.00013	.00343	.00032	.00236	.00096	.00124	.00587	.01257
%RSD	4.6769	187.53	174.86	30.268	37.565	56.009	30.982	143.50	143.50
#1	.20742	.00016	-.00439	-.00083	.00794	.00103	.00486	.00825	.01765
#2	.22161	-.00002	.00046	-.00127	.00461	.00239	.00312	-.00006	-.00013
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.00016	.00153	-.00002	.00106	-.02842	-.00042	.00412	-.00100
Stddev	.00073	.00000	.00069	.00004	.00070	.00760	.00000	.00024	.00277
%RSD	220.81	.50164	45.384	175.38	66.234	26.753	.40412	5.7646	277.35
#1	-.00019	.00016	.00202	-.00005	.00156	-.02305	-.00042	.00429	-.00296
#2	.00085	.00016	.00104	.00001	.00056	-.03380	-.00042	.00395	.00096
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3093.8	53126.	5289.8						
Stddev	2.6	94.	41.3						
%RSD	.08425	.17782	.77997						
#1	3092.0	53060.	5260.6						
#2	3095.7	53193.	5319.0						

Sample Name: 280-69353-A-1-A LOQV Acquired: 5/28/2015 15:41:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278146 6010C LOQV

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00002	As1890 ppm .00103	B_2089 ppm .00051	Ba4554 ppm .00221	Be3130 ppm .00034	Bi2230 ppm .00499	Ca3179 ppm .03733	Cd2288 ppm .00021
#1	.00004	-.00111	-.00612	.00082	.00443	.00058	-.00606	.08075	.00028
#2	-.00008	-.00094	.00294	.00021	.00000	.00009	-.00392	-.00609	.00013
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00028	Cu3247 ppm .00019	Fe2599 ppm .00013	K_7664 ppm .02393	Li6707 ppm .80642	Mg2790 ppm .00557	Mn2576 ppm .00419	Mo2020 ppm .00003
#1	-.00019	-.00003	-.00018	.04747	1.4853	.00776	.00589	-.00006	-.00017
#2	-.00037	-.00036	.00044	.00040	.12756	.00338	.00250	.00000	.00036
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .44226	P_1782 ppm .00035	Pb2203 ppm .00068	S_1820 ppm .00063	Sb2068 ppm .00477	Se1960 ppm .00188	Si2881 ppm .00495	SiO2 ppm .13327
#1	.67829	.00037	.00079	.00000	.00666	.00247	.00442	.24223	.51837
#2	.20622	.00034	.00057	-.00126	.00287	.00129	.00549	.02432	.05204
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00053	Th2837 ppm .00213	Ti3349 ppm .00029	Tl1908 ppm .00000	U_3701 ppm .00035	V_2924 ppm .02695	Zn2062 ppm .00048	Zr3391 ppm .00047
#1	.00172	.00429	.00011	.00011	-.00017	-.01886	-.00053	.00047	.00504
#2	-.00066	-.00003	-.00069	-.00011	-.00052	-.03504	-.00042	.00048	.00029
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3257.1	Y_3774 Cts/S 54556.	377.433 {89}					
#1	3253.2	54602.	5250.1						
#2	3261.0	54510.	5598.3						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 15:44:14 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00145	Al1670 ppm -.06956	Al3092 ppm 48.551	As1890 ppm -.00431	B_2089 ppm .00026	Ba4554 ppm .00006	Be3130 ppm .00019	Bi2230 ppm F -.00910	Ca3179 ppm -.00920	Cd2288 ppm .00012	Co2286 ppm .00000
#1	.-00131	-.06860	48.665	-.00551	.00071	.00043	.00013	-.00850	-.00561	.00020	.00012
#2	-.00159	-.07051	48.437	-.00312	-.00019	-.00031	.00025	-.00971	-.01278	.00003	-.00011
Check ? Value Range	None	None	Chk Pass	None	None	None	None	Chk Fail 1.0000 -10.490%	None	None	None
Elem Units Avg Stddev %RSD	Cr2055 ppm -.00017	Cu3247 ppm -.00017	Fe2714 ppm 47.763	K_7664 ppm .11595	Li6707 ppm .00277	Mg2790 ppm -.00750	Mn2576 ppm -.00001	Mo2020 ppm .00013	Na8183 ppm 247.69	Ni2316 ppm -.00047	P_1782 ppm -.00276
#1	-.00032	-.00085	47.787	.11129	.00283	-.00180	-.00004	.00011	247.76	-.00036	-.00471
#2	-.00002	.00050	47.740	.12061	.00270	-.01321	.00001	.00015	247.62	-.00057	-.00082
Check ? Value Range	None	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None
Elem Units Avg Stddev %RSD	Pb2203 ppm -.00071	S_1820 ppm F .00468	Sb2068 ppm .00106	Se1960 ppm .00434	Si2881 ppm -.00055	SiO2 ppm -.00118	Sn1899 ppm -.00038	Sr4077 ppm .00033	Th2837 ppm F .11068	Ti3349 ppm -.00025	Tl1908 ppm .00243
#1	-.00159	.00198	.00324	.00569	.01054	.02256	-.00034	.00032	.25235	-.00026	.00278
#2	.00018	.00739	-.00113	.00299	-.01165	-.02493	-.00041	.00034	-.03099	-.00024	.00208
Check ? Value Range	None	Chk Fail 5.0000 -10.490%	None	None	None	None	None	Chk Fail 5.0000 -10.490%	None	None	None
Elem Units Avg Stddev %RSD	U_3701 ppm F .31978	V_2924 ppm -.00031	Zn2062 ppm .00034	Zr3391 ppm .11745							
#1	.60228	.00042	.00027	.11137							
#2	.03729	-.00105	.00041	.12353							
Check ? Value Range	Chk Fail 10.000 -10.490%	None	None	None							
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3226.1	Y_3600 Cts/S 55881.	Y_3774 Cts/S 5670.1								
#1	3228.3	56207.	5638.0								
#2	3224.0	55554.	5702.3								

Sample Name: CCV-3290307 Acquired: 5/28/2015 15:46:48 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48092	.51517	1.0018	.51926	.46081	.45130	-.00314	4.5517	.51470	.49787	.47947	.48432	2.2881
Stddev	.00096	.00106	.0006	.00128	.00009	.00104	.00052	.0030	.00089	.00180	.00129	.00067	.0032
%RSD	.19934	.20605	.05661	.24675	.02029	.22960	16.641	.06525	.17297	.36234	.26815	.13750	.14067
#1	.48160	.51592	1.0022	.51835	.46075	.45057	-.00351	4.5496	.51532	.49660	.47856	.48385	2.2859
#2	.48024	.51442	1.0014	.52016	.46088	.45204	-.00277	4.5538	.51407	.49915	.48038	.48479	2.2904

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.685	.94920	19.248	.51077	.49020	4.9955	.49837	1.0393	.99700	-.00066	1.0168	1.0129	4.6460
Stddev	.056	.00543	.021	.00074	.00039	.0021	.00015	.0108	.00224	.00645	.0008	.0043	.0150
%RSD	.11780	.57183	.10774	.14432	.08041	.04145	.02913	1.0379	.22426	973.45	.07529	.42254	.32375
#1	47.646	.94537	19.263	.51025	.49047	4.9940	.49847	1.0469	.99542	.00390	1.0163	1.0098	4.6566
#2	47.725	.95304	19.234	.51129	.48992	4.9969	.49827	1.0316	.99858	-.00522	1.0173	1.0159	4.6353

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	9.9423	.99548	.46338	-.00349	.49719	1.0246	-.04224	.52282	.51039	.45279
Stddev	.0322	.00092	.00105	.00021	.00025	.0045	.00881	.00122	.00038	.00672
%RSD	.32375	.09193	.22644	5.9537	.05048	.43591	20.852	.23309	.07370	1.4836
#1	9.9651	.99612	.46264	-.00335	.49702	1.0278	-.03601	.52196	.51065	.44804
#2	9.9196	.99483	.46412	-.00364	.49737	1.0215	-.04846	.52369	.51012	.45754

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3151.5	53864.	5548.8								
Stddev	.7	51.	.2								
%RSD	.02303	.09461	.00439								
#1	3151.0	53828.	5548.6								
#2	3152.0	53900.	5548.9								

Sample Name: CCB Acquired: 5/28/2015 15:49:12 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00045	Al1670 ppm .00000	As1890 ppm -.00045	B_2089 ppm .00137	Ba4554 ppm -.00002	Be3130 ppm .00007	Bi2230 ppm -.00317	Ca3179 ppm -.00297	Cd2288 ppm .00019	Co2286 ppm -.00024	Cr2055 ppm -.00027	Cu3247 ppm -.00029
#1	-.00040	-.00099	.00031	.00203	.00001	.00012	-.00384	-.00112	.00016	-.00075	-.00023	-.00055
#2	-.00050	.00099	-.00120	.00071	-.00006	.00003	-.00250	-.00482	.00021	.00028	-.00030	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm -.00080	K_7664 ppm .11245	Li6707 ppm .00160	Mg2790 ppm .00314	Mn2576 ppm .00003	Mo2020 ppm -.00003	Na5895 ppm .18785	Ni2316 ppm -.00030	P_1782 ppm -.00025	Pb2203 ppm -.00043	S_1820 ppm .00408	Sb2068 ppm .00568
#1	-.00162	.07650	.00023	.00161	.00001	.00006	.18080	-.00030	.00172	-.00040	.00488	.00501
#2	.00002	.14841	.00298	.00466	.00004	-.00012	.19491	-.00029	-.00223	-.00046	.00328	.00634
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm F .00524	Si2881 ppm .02771	SiO2 ppm .05930	Sn1899 ppm -.00048	Sr4077 ppm .00004	Th2837 ppm -.00031	Ti3349 ppm .00005	TI1908 ppm .00000	U_3701 ppm .00878	V_2924 ppm .00011	Zn2062 ppm -.00027	Zr3391 ppm .00187
#1	.00627	.02909	.06225	.00029	.00005	.00072	-.00004	-.00120	-.00441	.00014	.00058	.00382
#2	.00421	.02633	.05635	-.00126	.00003	-.00134	.00013	.00120	.02196	.00007	-.00112	-.00008
Check ? High Limit Low Limit	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3155.0	Y_3600 Cts/S 54051.	Y_3774 Cts/S 5450.4									
#1	3153.4	54007.	5462.8									
#2	3156.6	54095.	5437.9									

Sample Name: CCVL3296658 Acquired: 5/28/2015 15:51:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00023	F -.00057	F -.00167	F .00070	F .00198	F .00027	F -.00436	F .04880	F .00013	F -.00010	F .00007
Stddev	.00075	.00082	.00066	.00025	.00296	.00024	.00034	.07237	.00009	.00002	.00020
%RSD	330.15	144.36	39.477	35.434	149.90	87.776	7.8106	148.28	66.099	22.913	298.45
#1	.00076	-.00115	-.00214	.00087	.00407	.00044	-.00460	.09997	.00020	-.00012	-.00007
#2	-.00030	.00001	-.00121	.00052	-.00012	.00010	-.00412	-.00237	.00007	-.00008	.00020
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.00500	.01000	.01000	.01000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00043	.08024	F .72946	F .00340	F -.00102	F .00001	F -.00007	F .39994	F .00007	F -.00282	F .00035
Stddev	.00011	.11287	.94192	.00381	.00388	.00009	.00004	.31260	.00097	.00066	.00169
%RSD	25.691	140.66	129.12	112.04	382.41	1620.7	53.437	78.160	1373.2	23.455	487.95
#1	-.00051	.16005	1.3955	.00609	-.00376	.00007	-.00004	.62098	.00076	-.00235	.00154
#2	-.00035	.00043	.06343	.00071	.00173	-.00006	-.00010	.17890	-.00062	-.00329	-.00085
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01500		3.0000	.01000	.20000	.01000	.02000	.10000	.04000	3.0000	.00900
Range	-30.000%		-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.00427	F .00159	F .00351	F .11576	F .24772	F -.00005	F .00209	F -.00064	F .00019	F .00097	F -.01967
Stddev	.00000	.00252	.00084	.11276	.24131	.00075	.00314	.00268	.00014	.00014	.00711
%RSD	.10268	158.05	23.956	97.412	97.412	1620.5	149.98	417.85	71.973	14.667	36.135
#1	.00427	-.00019	.00411	.19549	.41835	-.00057	.00432	.00125	.00009	.00107	-.02470
#2	.00427	.00337	.00292	.03602	.07709	.00048	-.00013	-.00254	.00028	.00087	-.01465
Check ?	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value		.01000	.01500	.50000	1.0700	.10000	.01000	.01500	.01000	.01500	.06000
Range		-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F .00004	F .00036	F .00386								
Stddev	.00001	.00007	.00162								
%RSD	20.247	19.763	41.995								
#1	.00004	.00031	.00500								
#2	.00005	.00041	.00271								
Check ?	Chk Fail	Chk Fail	Chk Fail								
Value	.01000	.02000	.01500								
Range	-30.000%	-30.000%	-30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3242.8	55690.	5657.0								
Stddev	9.0	58.	88.6								
%RSD	.27642	.10480	1.5662								
#1	3236.5	55731.	5594.4								
#2	3249.2	55648.	5719.7								

Sample Name: 280-69642-H-2-A @2 Acquired: 5/28/2015 15:53:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/26 Custom ID2: Custom ID3:

Comment: 278857 200.7 (K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	-.00315	-.00680	.02664	3.9527	.00008	.00223	191.10	.00037
Stddev	.00035	.00004	.00210	.00680	.2176	.00002	.00199	10.57	.00001
%RSD	74.928	1.3701	30.946	25.523	5.5048	29.174	89.185	5.5300	3.1941
#1	-.00022	-.00318	-.00829	.03145	4.1065	.00010	.00364	198.58	.00036
#2	-.00071	-.00312	-.00531	.02183	3.7988	.00006	.00082	183.63	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	-.00012	-.00008	1.3712	W 382.14	.16484	.28556	.00017	.00000
Stddev	.00030	.00001	.00023	.0953	.21.10	.01105	.32453	.00021	.00028
%RSD	89.884	10.198	287.67	6.9504	5.5205	6.7008	113.65	125.83	23386.
#1	-.00054	-.00012	.00008	1.4386	397.05	.17265	.51504	.00031	-.00020
#2	-.00012	-.00013	-.00025	1.3038	367.22	.15703	.05608	.00002	-.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3434.9	.00077	.00142	F -.00802	.01599	.00787	.00360	17.446	37.334
Stddev	181.3	.00049	.00494	.00237	.00539	.00261	.00016	1.073	2.296
%RSD	5.2766	63.120	347.85	29.534	33.720	33.228	4.4373	6.1508	6.1508
#1	3563.1	.00111	.00491	-.00970	.01981	.00602	.00371	18.205	38.958
#2	3306.7	.00043	-.00207	-.00635	.01218	.00972	.00348	16.687	35.710
Check ?	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Fail 200.00 -.00600	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	4.2236	-.00121	-.00097	.00223	.01656	-.00029	-.00022	.00231
Stddev	.00053	.2335	.00068	.00039	.00276	.03082	.00055	.00041	.00327
%RSD	68.242	5.5277	56.587	39.876	123.66	186.12	189.50	188.93	141.27
#1	.00115	4.3886	-.00073	-.00125	.00028	-.00523	-.00068	.00007	.00463
#2	.00040	4.0585	-.00169	-.00070	.00418	.03836	.00010	-.00050	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3260.9	56696.	5387.0						
Stddev	3.2	9.	16.8						
%RSD	.09775	.01530	.31254						
#1	3263.1	56690.	5398.9						
#2	3258.6	56702.	5375.1						

Sample Name: 280-69700-H-1-C @5 Acquired: 5/28/2015 15:56:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278857 200.7 (K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	.02544	.04471	.37376	1.1901	.00002	-.00025	27.923	.00026
Stddev	.00041	.00047	.00491	.0967	.0038	.00012	.00022	.008	.00030
%RSD	69.792	1.8308	10.982	2.5884	.31845	489.63	88.661	.02952	118.38
#1	.00030	.02577	.04124	3.6692	1.1927	-.00006	-.00009	27.929	.00047
#2	.00087	.02511	.04818	3.8060	1.1874	.00011	-.00041	27.917	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00186	.00629	.00223	.51427	W 222.54	.02796	33.710	.09480	.00373
Stddev	.00002	.00001	.00017	.00162	.21	.00063	.284	.00107	.00025
%RSD	.97973	.21162	7.6716	.31506	.09363	2.2544	.84193	1.1251	6.5914
#1	.00187	.00628	.00211	.51312	222.68	.02841	33.509	.09405	.00356
#2	.00184	.00629	.00235	.51541	222.39	.02752	33.910	.09556	.00390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 692.58	.01141	.22763	.00051	9.8144	.01519	.00121	5.9733	12.783
Stddev	.38	.00015	.00515	.00046	.1797	.00035	.00240	.0476	.102
%RSD	.05506	1.3160	2.2610	90.055	1.8307	2.3228	198.73	.79726	.79726
#1	692.85	.01152	.22399	.00019	9.6874	.01494	-.00049	5.9396	12.711
#2	692.31	.01131	.23127	.00084	9.9415	.01544	.00291	6.0069	12.855
Check ?	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00097	.88311	.00131	.00576	-.00193	-.00778	.00850	.00242	.00081
Stddev	.00033	.00123	.00136	.00042	.00145	.00568	.00021	.00079	.00015
%RSD	34.396	.13907	104.16	7.3662	75.128	73.065	2.4325	32.593	18.745
#1	.00073	.88398	.00035	.00546	-.00090	-.00376	.00864	.00186	.00091
#2	.00121	.88224	.00228	.00606	-.00296	-.01180	.00835	.00297	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2960.9	49554.	5510.2						
Stddev	9.5	27.	39.4						
%RSD	.32059	.05362	.71439						
#1	2967.6	49536.	5538.0						
#2	2954.2	49573.	5482.3						

Sample Name: 280-69700-H-2-C @5 Acquired: 5/28/2015 15:59:26 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278857 200.7 (K) 5x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00092	.05869	.04156	3.9078	1.6064	.00013	.00044	27.172	-.00016
#2	.00063	.05993	.03988	3.9798	1.6276	.00017	-.00173	27.610	.00071
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00170	.00629	.00102	.37176	284.04	.02945	38.626	.07973	.00322
#2	.00212	.00637	.00083	.38237	286.92	.03051	39.220	.07995	.00395
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	824.16	.01159	.23516	.00128	12.176	.01662	.00438	5.9596	12.754
#2	832.41	.01237	.24029	-.00007	12.523	.01489	.00423	6.1110	13.078
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00180	1.0351	-.00092	.00748	-.00373	.02390	.00757	.00009	.00047
#2	.00032	1.0497	-.00086	.00693	-.00137	-.01210	.00791	.00247	.00304
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2947.1	49161.	5620.3						
#2	2938.7	49073.	5668.9						

Sample Name: bottle check 69372-2 Acquired: 5/28/2015 16:02:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: bottle check (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	-.00362	-.00292	.04154	.03039	.00009	-.00028	42.362	.00016
Stddev	.00045	.00085	.00107	.00105	.00046	.00005	.00058	.667	.00011
%RSD	200.26	23.532	36.707	2.5183	1.5173	60.350	206.75	1.5742	67.906
#1	.00055	-.00302	-.00216	.04228	.03007	.00012	-.00069	41.891	.00008
#2	-.00009	-.00423	-.00367	.04080	.03072	.00005	.00013	42.834	.00023
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	.00022	.00003	5.1144	1.2531	.00151	15.582	2.4795	-.00083
Stddev	.00052	.00000	.00071	.0980	.0638	.00242	.019	.0098	.00041
%RSD	67.120	2.0003	2720.7	1.9153	5.0911	160.02	.12483	.39692	48.825
#1	.00115	.00021	-.00047	5.0451	1.2080	.00322	15.596	2.4865	-.00112
#2	.00041	.00022	.00053	5.1836	1.2982	-.00020	15.568	2.4725	-.00054
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.114	.00340	.36643	-.00114	.49106	-.00008	.00195	19.073	40.817
Stddev	.364	.00053	.00106	.00036	.00464	.00584	.00165	.367	.785
%RSD	1.6472	15.555	.28874	31.127	.94525	7028.4	84.427	1.9223	1.9223
#1	21.857	.00303	.36718	-.00089	.48778	.00405	.00079	18.814	40.262
#2	22.372	.00378	.36569	-.00139	.49434	-.00421	.00312	19.332	41.371
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00089	.16053	.00068	-.00003	-.00547	-.02681	.00031	-.00024	.00049
Stddev	.00170	.00210	.00220	.00038	.00343	.01909	.00030	.00082	.00167
%RSD	191.76	1.3101	323.31	1305.2	62.659	71.197	96.933	336.08	340.96
#1	-.00032	.15904	.00224	-.00030	-.00790	-.04031	.00052	.00033	.00167
#2	.00209	.16202	-.00088	.00024	-.00305	-.01332	.00010	-.00082	-.00069
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3230.7	54549.	5612.2						
Stddev	6.1	114.	204.8						
%RSD	.18843	.20913	3.6493						
#1	3235.0	54468.	5757.0						
#2	3226.4	54630.	5467.4						

Sample Name: bottle check 69372-4 Acquired: 5/28/2015 16:04:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: bottle check (Mg Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.00167	-.00292	.00537	.00001	.00010	.00088	.10993	-.00004
Stddev	.00045	.00004	.00417	.00025	.00015	.00001	.00135	.00540	.00012
%RSD	2697.7	2.6559	142.65	4.6662	1532.5	10.065	152.91	4.9111	300.41
#1	.00030	.00170	-.00587	.00555	-.00009	.00009	-.00007	.11375	.00005
#2	-.00034	.00163	.00003	.00519	.00011	.00011	.00183	.10611	-.00013
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	-.00010	-.00031	-.00184	.32829	.00178	.03177	.00022	.00008
Stddev	.00019	.00015	.00007	.00275	.04531	.00088	.00151	.00005	.00034
%RSD	318.53	146.02	22.528	149.88	13.802	49.659	4.7687	24.296	420.10
#1	.00007	.00000	-.00036	-.00378	.29625	.00240	.03070	.00026	.00032
#2	-.00019	-.00021	-.00026	.00011	.36033	.00115	.03284	.00018	-.00016
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.56754	.00047	-.00006	-.00036	.02770	-.00216	.00027	.05627	.12041
Stddev	.01848	.00011	.00273	.00063	.00197	.00058	.00254	.00477	.01021
%RSD	3.2569	22.584	4421.5	172.49	7.1189	26.568	929.21	8.4830	8.4830
#1	.55447	.00040	-.00199	.00008	.02631	-.00257	.00207	.05289	.11319
#2	.58061	.00055	.00187	-.00080	.02909	-.00176	-.00152	.05964	.12763
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.00058	-.00153	.00045	.00068	-.00824	.00017	.00051	-.00035
Stddev	.00054	.00000	.00171	.00026	.00015	.03682	.00057	.00009	.00089
%RSD	542.45	.62511	111.92	58.570	22.645	447.06	336.49	17.326	254.40
#1	.00048	.00058	-.00032	.00026	.00078	-.03427	-.00023	.00057	.00028
#2	-.00028	.00058	-.00274	.00064	.00057	.01780	.00057	.00044	-.00098
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3244.3	55198.	5563.5						
Stddev	4.6	36.	23.7						
%RSD	.14050	.06574	.42533						
#1	3241.1	55173.	5546.8						
#2	3247.5	55224.	5580.2						

Sample Name: bottle check 69372-6 Acquired: 5/28/2015 16:06:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: bottle check (Fe Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	-.00204	-.00529	.00524	.00782	.00004	-.00226	11.152	-.00002
Stddev	.00005	.00188	.00112	.00073	.01152	.00017	.00016	15.716	.00038
%RSD	15.146	92.319	21.188	13.969	147.43	381.71	7.0365	140.92	1895.0
#1	.00036	-.00336	-.00450	.00575	.01596	-.00007	-.00215	22.264	-.00029
#2	.00029	-.00071	-.00608	.00472	-.00033	.00016	-.00237	.03917	.00025
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	-.00003	-.00050	.88343	.42338	.00340	.00657	.00024	-.00026
Stddev	.00009	.00011	.00021	1.2402	.19764	.00020	.00328	.00019	.00018
%RSD	114.02	363.65	40.756	140.39	46.681	5.9759	49.890	78.202	67.169
#1	-.00014	.00005	-.00036	1.7604	.56313	.00354	.00425	.00037	-.00014
#2	-.00001	-.00011	-.00065	.00644	.28363	.00325	.00889	.00011	-.00039
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.4293	.00021	-.00198	-.00196	.00420	.00100	.00116	4.0790	8.7291
Stddev	11.315	.00015	.00256	.00357	.00052	.00285	.00090	5.7043	12.207
%RSD	134.23	74.364	129.04	182.53	12.320	283.63	77.219	139.84	139.84
#1	16.430	.00032	-.00017	-.00448	.00456	-.00101	.00053	8.1126	17.361
#2	.42842	.00010	-.00379	.00057	.00383	.00302	.00180	.04551	.09740
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00035	.04930	-.00203	-.00007	.00064	.00390	-.00055	.00072	.00147
Stddev	.00070	.06938	.00035	.00007	.00089	.00388	.00026	.00002	.00116
%RSD	200.05	140.72	17.415	101.35	138.35	99.469	46.738	2.7716	78.493
#1	-.00084	.09836	-.00228	-.00002	.00001	.00116	-.00037	.00073	.00229
#2	.00014	.00024	-.00178	-.00011	.00127	.00665	-.00073	.00071	.00066
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3189.9	54860.	5580.7						
Stddev	7.7	96.	27.3						
%RSD	.24157	.17476	.48878						
#1	3195.3	54792.	5561.4						
#2	3184.4	54928.	5600.0						

Sample Name: 280-69372-B-2-A Acquired: 5/28/2015 16:09:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/19 Custom ID2: Custom ID3:

Comment: 277951 6010B DQR (Fe)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00001	As1890 ppm .00110	B_2089 ppm .03660	Ba4554 ppm .02985	Be3130 ppm .00010	Bi2230 ppm .00127	Ca3179 ppm 41.909	Cd2288 ppm .00048
#1	-.00024	-.00112	-.00033	.03684	.03007	.00010	-.00197	41.946	.00023
#2	.00021	-.00108	.00258	.03636	.02964	.00009	-.00056	41.873	.00073
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00079	Cu3247 ppm .00049	Fe2599 ppm .00072	K_7664 ppm 5.0493	Li6707 ppm .68777	Mg2790 ppm .00117	Mn2576 ppm 15.343	Mo2020 ppm 2.4553
#1	.00069	.00052	.00060	5.0411	.69455	.00208	15.380	2.4593	-.00090
#2	.00089	.00046	.00084	5.0574	.68099	.00026	15.307	2.4513	-.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 21.497	P_1782 ppm .00360	Pb2203 ppm .34897	S_1820 ppm -.00159	Sb2068 ppm .47179	Se1960 ppm -.00240	Si2881 ppm .00298	SiO2 ppm 18.597
#1	21.108	.00323	.34641	-.00181	.46869	-.00121	.00270	18.533	39.660
#2	21.886	.00398	.35153	-.00137	.47488	-.00358	.00325	18.662	39.936
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00083	Th2837 ppm .15849	Ti3349 ppm -.00002	Tl1908 ppm -.00032	U_3701 ppm -.00464	V_2924 ppm -.01945	Zn2062 ppm .00024	Zr3391 ppm .00017
#1	.00169	.15818	.00075	-.00049	-.00365	-.02324	.00056	.00020	-.00072
#2	-.00004	.15880	-.00079	-.00015	-.00563	-.01567	-.00007	.00014	.00053
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3178.6	Y_3774 Cts/S 53674.	377.433 {89}	Cts/S 69.	Cts/S 39.2	Cts/S .71449	Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	3179.5	53625.	5511.6						
#2	3177.6	53723.	5456.1						

Sample Name: 280-69372-B-4-A Acquired: 5/28/2015 16:12:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 277951 6010B DQR (Mg Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00061	.00394	-.00441	.00426	.00012	.00000	-.00134	.11613	-.00029
#2	.00005	.00426	-.00606	.00410	.00004	-.00005	-.00368	.11754	.00048
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.35263	.00112	-.00073	-.00088	.02236	-.00285	.00606	.05448	.11659
#2	.36143	.00039	-.00061	-.00124	.03335	-.00361	.00157	.05803	.12419
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00105	.00057	.00180	.00009	-.00132	-.02922	-.00018	.00230	.00136
#2	-.00027	.00043	-.00095	-.00026	.00272	.00708	-.00050	.00113	.00056
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3265.4	56027.	5428.9						
#2	3261.3	55553.	5541.4						

Sample Name: 280-69372-B-6-A Acquired: 5/28/2015 16:14:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 277951 6010B DQR (Fe Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	-.00232	-.00326	.00393	.00771	.00008	-.00476	10.910	.00000
Stddev	.00013	.00174	.00112	.00033	.01108	.00000	.00002	15.380	.00040
%RSD	15.907	74.892	34.171	8.4746	143.73	1.9490	.42874	140.97	23852.
#1	.00090	-.00355	-.00405	.00416	.01555	.00008	-.00478	21.785	-.00028
#2	.00071	-.00109	-.00248	.00369	-.00013	.00008	-.00475	.03502	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	-.00021	-.00009	.86495	.28650	.00304	.00562	.00013	-.00022
Stddev	.00004	.00026	.00016	1.2121	.19813	.00020	.00373	.00018	.00010
%RSD	11.538	121.00	173.04	140.14	69.156	6.4489	66.317	140.66	45.764
#1	-.00039	-.00003	-.00021	1.7221	.42660	.00290	.00826	.00026	-.00015
#2	-.00033	-.00040	.00002	.00783	.14640	.00318	.00299	.00000	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.1728	.00007	.00023	W -.00353	.00261	.00014	.00085	3.9920	8.5429
Stddev	11.129	.00045	.00165	.00283	.00123	.00015	.00774	5.6134	12.013
%RSD	136.17	689.46	731.94	80.186	47.019	111.02	915.03	140.62	140.62
#1	16.042	.00039	-.00094	-.00553	.00174	.00024	.00632	7.9613	17.037
#2	.30357	-.00025	.00139	-.00153	.00348	.00003	-.00463	.02272	.04862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.04886	.00125	-.00022	.00128	-.00606	.00007	.00007	.00136
Stddev	.00032	.06905	.00068	.00013	.00008	.00646	.00021	.00034	.00047
%RSD	617.46	141.31	54.075	57.889	6.4171	106.57	324.08	499.97	34.174
#1	.00028	.09769	.00078	-.00013	.00134	-.00149	.00022	.00031	.00103
#2	-.00018	.00004	.00173	-.00031	.00123	-.01063	-.00008	-.00017	.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3204.3	55305.	5731.8						
Stddev	31.7	174.	106.8						
%RSD	.98977	.31478	1.8639						
#1	3226.7	55182.	5807.3						
#2	3181.9	55428.	5656.2						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 16:16:56 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-0.0574	48.223	-0.0075	.00503	.00065	.00015	1.0264	.02459	-.00017	-.00059	.00040	.00019	47.753
Stddev	.00065	.106	.00675	.00095	.00028	.00009	.0101	.00150	.00009	.00005	.00004	.00025	.287
%RSD	11.382	.21995	898.15	18.918	43.346	57.978	.98524	6.0852	55.519	8.2949	11.360	131.04	.60147
#1	-.00528	48.298	.00402	.00436	.00045	.00021	1.0193	.02565	-.00010	-.00062	.00043	.00037	47.550
#2	-.00620	48.148	-.00553	.00570	.00085	.00009	1.0336	.02353	-.00024	-.00056	.00036	.00001	47.956

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.17153	.00149	.05720	.00156	-.00002	249.48	.00286	.00463	.00024	5.0429	-.00782	.00837	-.00686
Stddev	.02418	.00155	.00783	.00004	.00014	.92	.00009	.00172	.00122	.1124	.00082	.00252	.00133
%RSD	14.098	103.77	13.683	2.8433	827.18	.36730	3.0924	37.196	503.30	2.2300	10.464	30.151	19.430
#1	.15443	.00040	.05167	-.00153	.00008	250.13	.00292	.00584	.00111	4.9634	-.00724	.00658	-.00780
#2	.18863	.00258	.06274	-.00159	-.00012	248.83	.00279	.00341	-.00062	5.1224	-.00840	.01015	-.00592

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.01468	-.00181	.00036	5.0371	-.01194	.00132	10.488	.00260	-.00054	-.14293
Stddev	.00285	.00149	.00000	.0046	.00008	.00299	.081	.00010	.00011	.00046
%RSD	19.430	82.265	.20555	.09240	.67098	226.31	.76766	3.7089	20.433	.32230
#1	-.01670	-.00286	.00036	5.0338	-.01200	.00343	10.431	.00253	-.00047	-.14325
#2	-.01266	-.00076	.00036	5.0404	-.01189	-.00079	10.545	.00267	-.00062	-.14260

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3082.1	51907.	5248.5
Stddev	5.9	385.	45.3
%RSD	.19022	.74077	.86390
#1	3077.9	52179.	5216.4
#2	3086.2	51635.	5280.5

Sample Name: CCV-3290307 Acquired: 5/28/2015 16:19:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48553	.52683	1.0062	.52536	.46926	.45788	-.00589	4.6813	.51978	.50134	.48841	.48798	2.3852
Stddev	.00049	.00082	.0004	.00073	.00073	.00197	.00092	.0003	.00111	.00091	.00481	.00203	.0076
%RSD	.09993	.15502	.03625	.13955	.15570	.42956	15.611	.00651	.21327	.18064	.98473	.41530	.31748
#1	.48519	.52741	1.0064	.52484	.46875	.45649	-.00524	4.6815	.52057	.50198	.48501	.48941	2.3798
#2	.48588	.52626	1.0059	.52587	.46978	.45927	-.00654	4.6811	.51900	.50070	.49181	.48655	2.3905

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.504	.96441	19.421	.51411	.49415	5.1299	.50144	1.0463	1.0067	.01357	1.0247	1.0349	4.6738
Stddev	.043	.00437	.033	.00012	.00039	.0112	.00014	.0007	.0001	.00545	.0016	.0053	.0129
%RSD	.08811	.45279	.16911	.02301	.07974	.21835	.02708	.06893	.00458	40.168	.15417	.50714	.27646
#1	48.474	.96133	19.445	.51419	.49443	5.1220	.50153	1.0468	1.0067	.00971	1.0235	1.0386	4.6829
#2	48.534	.96750	19.398	.51402	.49387	5.1378	.50134	1.0458	1.0066	.01742	1.0258	1.0311	4.6646

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.002	1.0043	.47168	-.00517	.49985	1.0306	-.00478	.52266	.52573	.45977
Stddev	.028	.0005	.00164	.00223	.00054	.0025	.01013	.00514	.00028	.00185
%RSD	.27646	.04558	.34683	43.211	.10776	.24492	211.90	.98303	.05361	.40140
#1	10.021	1.0040	.47052	-.00359	.50023	1.0288	-.01194	.52629	.52593	.45846
#2	9.9823	1.0047	.47283	-.00675	.49947	1.0324	.00238	.51903	.52553	.46107

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3193.4	53665.	5478.8									
Stddev	26.5	47.	19.8									
%RSD	.83014	.08681	.36198									
#1	3174.7	53698.	5464.8									
#2	3212.2	53632.	5492.8									

Sample Name: CCB Acquired: 5/28/2015 16:21:53 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00014	-.00109	-.00132	.00421	-.00009	.00005	-.00489	-.00205	.00003	-.00026	-.00028	-.00006	-.00146
Stddev	.00046	.00030	.00550	.00018	.00008	.00000	.00045	.00109	.00005	.00006	.00008	.00013	.00159
%RSD	334.39	27.390	416.90	4.3752	81.104	.69552	9.2367	53.088	178.12	24.276	27.138	223.55	109.25
#1	.00047	-.00088	-.00521	.00434	-.00015	.00005	-.00457	-.00128	-.00001	-.00022	-.00033	.00003	-.00259
#2	-.00019	-.00130	.00257	.00408	-.00004	.00005	-.00521	-.00281	.00006	-.00031	-.00023	-.00015	-.00033

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.08469	.00053	-.00161	-.00001	.00025	.18355	-.00013	-.00361	-.00109	-.00104	.00213	.00031	.02587
Stddev	.00593	.00156	.00514	.00001	.00005	.00402	.00027	.00319	.00040	.00612	.00045	.00148	.01077
%RSD	7.0010	291.84	319.31	90.383	21.905	2.1913	208.27	88.485	37.165	587.77	21.331	476.82	41.614
#1	.08888	.00163	-.00524	.00000	.00028	.18071	.00006	-.00135	-.00138	-.00537	.00245	.00136	.03349
#2	.08049	-.00057	.00202	-.00002	.00021	.18640	-.00033	-.00586	-.00080	.00329	.00181	-.00074	.01826

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.05537	.00060	.00003	-.00035	.00029	.00054	.01018	-.00018	-.00081	-.00034			
Stddev	.02304	.00019	.00001	.00120	.00022	.00164	.01472	.00005	.00073	.00027			
%RSD	41.614	32.270	32.710	344.40	74.593	305.14	144.53	25.978	89.712	81.541			
#1	.07166	.00046	.00003	.00050	.00045	.00169	-.00022	-.00021	-.00133	-.00014			
#2	.03908	.00074	.00004	-.00120	.00014	-.00062	.02059	-.00015	-.00030	-.00053			

Check ? High Limit Low Limit	Chk Pass												
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3185.3	55298.	5582.4										
Stddev	60.5	37.	51.8										
%RSD	1.8990	.06757	.92836										
#1	3228.1	55325.	5545.7										
#2	3142.5	55272.	5619.0										

Sample Name: CCVL3296658 Acquired: 5/28/2015 16:24:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00038	F -.00114	F -.00319	F .00237	F .00207	F .00024	F -.00270	F .04175	F .00033	F -.00002	F .00007
Stddev	.00054	.00024	.00395	.00125	.00325	.00034	.00152	.06644	.00031	.00027	.00038
%RSD	140.60	20.975	123.76	52.813	156.54	141.21	56.408	159.15	92.447	1548.8	534.11
#1	.00076	-.00097	-.00598	.00325	.00437	.00049	-.00162	.08873	.00055	.00017	.00034
#2	.00000	-.00131	-.00040	.00148	-.00022	.00000	-.00377	-.00523	.00012	-.00021	-.00020
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00075	F .02185	F .78655	F .00425	F .00002	F .00000	F -.00009	F .39306	F .00023	F -.00363	F -.00145
Stddev	.00001	.02888	.94030	.00494	.00225	.0001	.00017	.34620	.00046	.00182	.00009
%RSD	.99159	132.18	119.55	116.06	9963.6	1890.4	188.68	88.078	200.87	50.163	6.1613
#1	-.00076	.04227	1.4514	.00775	.00161	-.00006	-.00021	.63785	.00055	-.00491	-.00139
#2	-.00074	.00143	.12166	.00076	-.00157	.00006	.00003	.14826	-.00010	-.00234	-.00152
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.00300	F -.00177	F .00354	F .11888	F .25441	F -.00031	F .00218	F .00094	F -.00019	F .00013	F -.01075
Stddev	.00549	.00424	.00179	.13675	.29264	.00052	.00324	.00060	.00001	.00169	.00650
%RSD	183.05	239.27	50.536	115.03	115.03	168.49	148.37	64.071	6.7226	1306.6	60.413
#1	.00688	-.00478	.00227	.21558	.46134	-.00067	.00448	.00051	-.00018	.00133	-.01535
#2	-.00088	.00123	.00480	.02219	.04748	.00006	-.00011	.00137	-.00020	-.00107	-.00616
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00035	F -.00034	F .00481								
Stddev	.00011	.00018	.00427								
%RSD	31.573	52.991	88.856								
#1	-.00027	-.00046	.00783								
#2	-.00043	-.00021	.00179								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3264.6	56097.	5588.7								
Stddev	23.8	6.	1.3								
%RSD	.72817	.01041	.02364								
#1	3281.5	56101.	5589.6								
#2	3247.8	56092.	5587.8								

Sample Name: MB 280-279083/1-B Acquired: 5/28/2015 16:26:25 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: 5/28 Custom ID2: Custom ID3:
 Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	-.00109	-.00251	.00254	-.00020	.00013	-.00189	.00643	.00008
Stddev	.00050	.00046	.00001	.00005	.00008	.00014	.00177	.00171	.00004
%RSD	240.38	42.069	.59568	1.7900	39.227	104.36	93.672	26.542	48.400
#1	-.00014	-.00077	-.00252	.00250	-.00025	.00023	-.00314	.00523	.00011
#2	.00056	-.00141	-.00250	.00257	-.00014	.00003	-.00064	.00764	.00005
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	-.00009	-.00061	.00142	.13617	.00065	.00302	-.00004	.00012
Stddev	.00011	.00013	.00002	.00013	.01109	.00217	.00396	.00002	.00034
%RSD	312.51	149.49	3.7604	8.9475	8.1438	335.97	131.21	41.612	286.14
#1	-.00011	-.00018	-.00059	.00133	.14401	-.00089	.00022	-.00005	.00036
#2	.00004	.00000	-.00062	.00151	.12833	.00218	.00582	-.00003	-.00012
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34377	.00028	-.00094	-.00251	.00003	.00114	-.00020	.00978	.02093
Stddev	.00108	.00022	.00044	.00018	.00238	.00165	.00003	.00573	.01226
%RSD	.31349	78.000	46.940	7.2856	8268.0	145.32	16.166	58.556	58.556
#1	.34301	.00043	-.00126	-.00238	-.00165	.00230	-.00018	.01383	.02960
#2	.34453	.00013	-.00063	-.00263	.00171	-.00003	-.00022	.00573	.01226
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00018	-.00031	-.00011	.00072	-.00106	-.00002	.00005	.00061
Stddev	.00150	.00005	.00081	.00035	.00223	.02158	.00016	.00016	.00082
%RSD	276.28	26.488	261.99	308.79	308.79	2043.2	1023.8	327.18	134.72
#1	.00160	.00022	-.00088	.00013	-.00086	.01420	-.00013	-.00006	.00119
#2	-.00052	.00015	.00026	-.00036	.00230	-.01631	.00010	.00016	.00003
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3252.2	55812.	5593.2						
Stddev	12.9	231.	18.1						
%RSD	.39708	.41407	.32368						
#1	3243.0	55975.	5606.0						
#2	3261.3	55648.	5580.4						

Sample Name: LCS 280-279083/2-B Acquired: 5/28/2015 16:28:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00044	F .00181	F .00348	F .00315	F 1.8484	F .04560	F .00136	F 44.300	F .00035
Stddev	.00427	.00001	.00084	.00088	.0325	.00072	.00087	.772	.00027
%RSD	981.01	.75709	24.087	27.991	1.7580	1.5840	64.298	1.7428	76.880
#1	.00258	-.00180	-.00408	.00378	1.8254	.04509	.00197	43.754	.00053
#2	-.00345	-.00182	-.00289	.00253	1.8713	.04611	.00074	44.846	.00016
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Fail	Chk Fail
High Limit	.05750	2.2299	1.1050	1.1050				55.500	.11100
Low Limit	.04275	1.7300	.87500	.86000				44.750	.08800
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00016	F .00015	F .01928	F .91036	F 47.956	F .94841	F 3.3341	F .03504	F .00008
Stddev	.00033	.00016	.02227	.01474	.861	.01643	4.6604	.04907	.00002
%RSD	199.48	104.94	115.50	1.6191	1.7963	1.7322	139.78	140.01	29.501
#1	-.00039	-.00026	.03503	.89993	47.347	.93679	6.6295	.06974	-.00010
#2	.00007	-.00004	.00353	.92078	48.566	.96002	.03869	.00035	-.00006
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit	.55500	.05750	.28000				56.500	.55000	1.1000
Low Limit	.44500	.04275	.21500				46.000	.45000	.90000
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.276	F .00059	F .00014	F .00323	F -.00089	F .00155	F .00353	9.2937	19.888
Stddev	1.219	.00039	.00020	.00065	.00161	.00073	.00255	.2174	.465
%RSD	2.3768	65.939	141.61	20.140	179.91	47.090	72.204	2.3388	2.3388
#1	50.414	.00087	.00028	-.00277	.00024	.00207	.00173	9.1400	19.560
#2	52.138	.00032	.00000	-.00369	-.00203	.00104	.00533	9.4474	20.217
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Pass	None
High Limit	.55500	.55500	.11.100	.55000		.55499	2.2400		
Low Limit	.44500	.44500	9.1000	.44500		.44000	1.7000		
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00039	.92259	F .05883	F .06817	F -.00008	F .10638	F .03473	F .03366	.48003
Stddev	.00027	.01574	.09781	.09551	.00159	.21096	.04881	.04640	.01409
%RSD	69.016	1.7059	166.27	140.09	2102.9	198.31	140.53	137.84	2.9351
#1	-.00058	.91146	.12799	.13570	-.00120	.25555	.06924	.06647	.47007
#2	-.00020	.93372	-.01033	.00064	.00105	-.04279	.00022	.00085	.48999
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass
High Limit	2.2600		1.2000	1.1100	2.2000	2.3000	.55500	.55500	
Low Limit	1.7000		.80000	.90000	1.7600	1.7000	.45000	.42500	
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3216.7	55246.	5410.4						
Stddev	10.1	266.	104.7						
%RSD	.31316	.48199	1.9354						
#1	3223.8	55058.	5484.5						
#2	3209.6	55435.	5336.4						

Sample Name: 280-69494-D-1-B Acquired: 5/28/2015 16:31:14 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	1.2817	-.00160	.00690	.01272	-.00015	-.00149	252.90	-.00005
Stddev	.00043	.0008	.00135	.00059	.00002	.00010	.00253	.91	.00021
%RSD	66.634	.06454	84.659	8.5219	.16989	67.929	169.39	.35796	387.95
#1	.00095	1.2823	-.00255	.00732	.01273	-.00022	.00030	253.54	-.00020
#2	.00034	1.2811	-.00064	.00649	.01270	-.00008	-.00328	252.26	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	.00072	.00698	-.00168	2.5897	.01367	16.962	.93272	-.00217
Stddev	.00004	.00019	.00027	.00132	.0242	.00057	.019	.00196	.00020
%RSD	5.3168	25.735	3.8654	78.165	.93467	4.1818	.11141	.20963	9.2931
#1	.00071	.00059	.00717	-.00075	2.6068	.01407	16.975	.93410	-.00203
#2	.00076	.00085	.00679	-.00261	2.5725	.01327	16.949	.93133	-.00232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.817	.00500	.00152	.00630	F 255.00	.00828	.00662	.21573	.46167
Stddev	162	.00046	.00154	.00084	.39	.00192	.00347	.00505	.01080
%RSD	1.3718	9.2374	101.12	13.336	.15350	23.152	52.358	2.3396	2.3396
#1	11.932	.00467	.00043	.00690	255.28	.00963	.00417	.21930	.46930
#2	11.703	.00533	.00261	.00571	254.73	.00692	.00907	.21216	.45403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00276	.68350	.00030	-.00086	-.00892	-.03012	-.00108	.00107	-.00018
Stddev	.00147	.00127	.00206	.00014	.00136	.05021	.00005	.00051	.00022
%RSD	53.253	.18618	681.77	16.619	15.270	166.72	4.7185	47.989	122.18
#1	.00172	.68440	-.00115	-.00076	-.00989	.00539	-.00112	.00071	-.00002
#2	.00380	.68260	.00176	-.00096	-.00796	-.06562	-.00105	.00144	-.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3008.8	51786.	5410.8						
Stddev	1.2	248.	45.1						
%RSD	.04014	.47864	.83371						
#1	3007.9	51611.	5378.9						
#2	3009.6	51961.	5442.7						

Sample Name: 280-69622-C-1-D Acquired: 5/28/2015 16:33:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	.00246	-.00321	.10603	.09533	-.00003	-.00590	83.700	.00014
Stddev	.00030	.00092	.00111	.00051	.00233	.00018	.00217	1.836	.00018
%RSD	33.838	37.591	34.724	.47696	2.4441	539.71	36.876	2.1937	131.84
#1	.00067	.00311	-.00400	.10568	.09369	.00010	-.00743	82.402	.00001
#2	.00109	.00181	-.00242	.10639	.09698	-.00016	-.00436	84.998	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	.00052	.00120	.00875	7.2258	.03762	18.144	.00103	-.00091
Stddev	.00019	.00047	.00025	.00241	.2418	.00088	.025	.00002	.00028
%RSD	80.030	90.889	20.951	27.558	3.3462	2.3394	.14011	2.0067	31.036
#1	-.00037	.00085	.00102	.00705	7.0548	.03825	18.126	.00104	-.00071
#2	-.00010	.00019	.00138	.01046	7.3968	.03700	18.162	.00101	-.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	117.96	.00548	.09957	.00214	57.669	.00010	.00944	7.7331	16.549
Stddev	.35	.00011	.00051	.00093	.030	.00236	.00122	.2501	.535
%RSD	.29942	2.0672	.51191	43.467	.05256	2373.4	12.949	3.2340	3.2340
#1	117.71	.00540	.09921	.00280	57.647	-.00157	.01031	7.5562	16.170
#2	118.21	.00556	.09993	.00148	57.690	.00177	.00858	7.9099	16.927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.94489	.00017	-.00023	-.00719	-.01817	.00216	.00092	-.00069
Stddev	.00117	.01984	.00258	.00026	.00284	.01102	.00016	.00007	.00100
%RSD	374.61	2.0999	1509.6	116.13	39.524	60.637	7.2833	7.0618	145.29
#1	-.00051	.93086	-.00165	-.00042	-.00518	-.02597	.00205	.00088	.00002
#2	.00114	.95892	.00199	-.00004	-.00920	-.01038	.00227	.00097	-.00139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3021.5	51112.	5320.8						
Stddev	2.0	285.	143.6						
%RSD	.06735	.55839	2.6995						
#1	3020.1	51314.	5422.4						
#2	3022.9	50910.	5219.2						

Sample Name: 280-69622-C-1-D SD@5 Acquired: 5/28/2015 16:36:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	-.00066	.00132	.02199	.01876	.00015	-.00312	16.628	.00027
Stddev	.00045	.00017	.00218	.00053	.00032	.00003	.00195	.130	.00014
%RSD	218.24	25.246	165.64	2.4060	1.7292	18.745	62.670	.77904	54.426
#1	-.00052	-.00078	-.00023	.02236	.01853	.00017	-.00174	16.720	.00016
#2	.00011	-.00054	.00286	.02162	.01899	.00013	-.00450	16.536	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00056	-.00007	-.00046	.00356	1.5051	.00814	3.7041	.00020	-.00048
Stddev	.00007	.00001	.00026	.00156	.0377	.00167	.0541	.00005	.00001
%RSD	12.569	14.153	57.971	43.805	2.5034	20.522	1.4591	25.076	1.6395
#1	-.00051	-.00007	-.00064	.00246	1.5318	.00932	3.7423	.00016	-.00047
#2	-.00060	-.00008	-.00027	.00466	1.4785	.00696	3.6659	.00023	-.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.067	.00231	.01668	.00146	11.469	.00059	.00217	1.5243	3.2621
Stddev	.022	.00039	.00063	.00017	.077	.00140	.00354	.0009	.0019
%RSD	.09363	16.795	3.7509	11.864	.66952	238.22	162.77	.05952	.05952
#1	23.052	.00259	.01624	.00159	11.414	-.00040	-.00033	1.5237	3.2607
#2	23.083	.00204	.01713	.00134	11.523	.00157	.00468	1.5250	3.2635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.18659	-.00091	-.00001	-.00082	-.01051	-.00034	.00008	-.00015
Stddev	.00033	.00060	.00061	.00000	.00077	.00198	.00002	.00023	.00037
%RSD	214.75	.31913	67.777	4.5555	93.906	18.822	6.9371	297.98	250.08
#1	.00008	.18701	-.00134	-.00001	-.00137	-.00911	-.00032	.00024	-.00041
#2	-.00039	.18616	-.00047	-.00001	-.00028	-.01191	-.00036	-.00009	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3198.3	53834.	5364.5						
Stddev	9.5	309.	59.2						
%RSD	.29596	.57384	1.1039						
#1	3205.0	53616.	5322.6						
#2	3191.6	54053.	5406.4						

Sample Name: 280-69622-C-1-E MS Acquired: 5/28/2015 16:38:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04444	1.8803	.98079	1.1162	1.9012	.04428	F 1.9593	126.24	.10085
Stddev	.00001	.0035	.00624	.0005	.0192	.00034	.0017	1.10	.00029
%RSD	.02625	.18764	.63598	.04298	1.0081	.76623	.08857	.86974	.28704
#1	.04445	1.8828	.98520	1.1158	1.9148	.04452	1.9605	127.01	.10106
#2	.04443	1.8778	.97638	1.1165	1.8877	.04404	1.9581	125.46	.10065
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46337	W 17450	.23940	.88063	54.281	.97389	64.278	.48979	.99279
Stddev	.00193	.00071	.00047	.00613	.510	.00673	.108	.00083	.00001
%RSD	.41551	.40432	.19675	.69645	.94010	.69053	.16869	.16991	.00107
#1	.46473	.17400	.23973	.88496	54.642	.97865	64.355	.48920	.99278
#2	.46201	.17500	.23906	.87629	53.920	.96914	64.201	.49038	.99279
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	165.99	.46429	W 10.671	.46182	61.361	.50898	2.0117	16.716	35.772
Stddev	1.84	.00028	.039	.00111	.004	.00639	.0267	.036	.076
%RSD	1.1098	.05991	.36687	.23986	.00693	1.2551	1.3247	.21341	.21341
#1	167.29	.46409	10.698	.46104	61.364	.51350	2.0305	16.691	35.718
#2	164.69	.46449	10.643	.46260	61.358	.50447	1.9929	16.741	35.826
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.1.0000							
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9300	1.8608	.98321	.97632	1.8369	2.0266	.50839	.48137	.41741
Stddev	.0223	.0185	.00022	.00072	.0304	.0339	.00289	.00068	.00244
%RSD	1.1567	.99253	.02238	.07366	1.6531	1.6711	.56792	.14029	.58576
#1	1.9458	1.8739	.98337	.97581	1.8584	2.0026	.50635	.48089	.41568
#2	1.9142	1.8477	.98306	.97683	1.8154	2.0505	.51043	.48185	.41914
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2996.1	51241.	5472.2						
Stddev	3.9	65.	36.0						
%RSD	.13146	.12664	.65703						
#1	2993.3	51287.	5446.8						
#2	2998.9	51195.	5497.6						

Sample Name: 280-69622-C-1-F MSD Acquired: 5/28/2015 16:41:14 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04568	1.9016	1.0095	1.1609	1.9346	.04528	2.0169	126.12	.10364
#2	.04440	1.8997	1.0098	1.1526	1.9876	.04659	2.0084	129.67	.10254
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.47303	.17827	.24642	.89935	54.862	.99428	65.158	.49982	1.0216
#2	.47283	.17816	.24662	.92596	56.538	1.0194	65.104	.49826	1.0194
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	166.54	.47375	10.911	.47585	61.954	.52623	2.0544	16.804	35.960
#2	170.22	.47301	10.883	.47641	61.697	.52378	2.0349	17.290	37.001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9629	1.8734	1.0080	1.0005	1.8770	2.0657	.51883	.48902	.42488
#2	1.9500	1.9257	1.0075	.99928	1.8569	2.0445	.51880	.48258	.44266
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2996.6	51228.	5474.1						
#2	2999.1	51508.	5386.8						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 16:43:32 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -00582	Al3092 ppm 48.255	As1890 ppm -00716	B_2089 ppm .00369	Ba4554 ppm .00048	Be3130 ppm .00017	Bi2230 ppm 1.0345	Ca3179 ppm .03711	Cd2288 ppm -.00015	Co2286 ppm -.00072	Cr2055 ppm .00032
#1	-.00556	47.688	-.00861	.00351	.00057	.00020	1.0357	.03933	.00007	-.00036	.00025
#2	-.00609	48.822	-.00572	.00386	.00039	.00014	1.0332	.03490	-.00037	-.00109	.00038
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00070	Fe2714 ppm 47.762	K_7664 ppm .19108	Li6707 ppm .00280	Mg2790 ppm .05145	Mn2576 ppm -.00165	Mo2020 ppm -.00016	Na8183 ppm 249.78	Ni2316 ppm .00302	P_1782 ppm .00341	Pb2203 ppm .00190
#1	.00126	46.950	.13017	.00243	.05159	-.00161	-.00032	247.00	.00338	.00702	.00364
#2	.00014	48.574	.25198	.00317	.05132	-.00168	.00000	252.56	.00266	-.00019	.00016
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0294	Sb2068 ppm -.01191	Se1960 ppm .01670	Si2881 ppm .00684	SiO2 ppm .01464	Sn1899 ppm -.00207	Sr4077 ppm .00045	Th2837 ppm 5.0153	Ti3349 ppm -.01191	TI1908 ppm .00123	U_3701 ppm W 10.589
#1	5.0305	-.01663	0.1627	-.00207	-.00442	-.00279	.00049	5.0205	-.01192	.00207	10.542
#2	5.0282	-.00718	.01712	.01575	.03371	-.00135	.00041	5.0102	-.01191	.00039	10.637
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00235	Zn2062 ppm -.00050	Zr3391 ppm -.13965								
#1	.00218	-.00120	-.14204								
#2	.00253	.00020	-.13725								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3130.4	Y_3600 Cts/S 53215.	Y_3774 Cts/S 5499.9								
#1	3131.8	53381.	5548.7								
#2	3129.0	53048.	5451.1								

Sample Name: CCV-3290307 Acquired: 5/28/2015 16:46:04 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .48375	Al1670 ppm .52788	As1890 ppm .99150	B_2089 ppm .51586	Ba4554 ppm .46164	Be3130 ppm W .44990	Bi2230 ppm -.00258	Ca3179 ppm 4.5603	Cd2288 ppm .51213	Co2286 ppm .49115	Cr2055 ppm .47960
#1	.48408	.52961	.99171	.51772	.46281	.45067	-.00382	4.5799	.51187	.49185	.47983
#2	.48343	.52616	.99129	.51399	.46048	.44913	-.00134	4.5407	.51238	.49046	.47938
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .50000 -10.000%	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .48562	Fe2599 ppm 2.3096	K_7664 ppm 47.665	Li6707 ppm .94986	Mg2790 ppm 19.286	Mn2576 ppm .50666	Mo2020 ppm .48572	Na5895 ppm 5.0780	Ni2316 ppm .49255	P_1782 ppm 1.0269	Pb2203 ppm .98986
#1	.48495	2.3128	47.846	.95459	19.338	.50767	.48756	5.0855	.49326	1.0274	.99074
#2	.48628	2.3063	47.484	.94513	19.233	.50565	.48388	5.0706	.49185	1.0263	.98898
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .01323	Sb2068 ppm 1.0066	Se1960 ppm 1.0064	Si2881 ppm 4.6434	SiO2 ppm 9.9369	Sn1899 ppm .98779	Sr4077 ppm .46347	Th2837 ppm -.00223	Ti3349 ppm .49559	TI1908 ppm 1.0155	U_3701 ppm -.04157
#1	.01264	1.0047	.99925	4.6333	9.9153	.98742	.46431	-.00287	.49593	1.0160	-.03809
#2	.01382	1.0085	1.0136	4.6535	9.9585	.98816	.46263	-.00159	.49525	1.0149	-.04505
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .51395	Zn2062 ppm .50611	Zr3391 ppm .45646								
#1	.51935	.50870	.45745								
#2	.50855	.50353	.45547								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3194.7	Y_3600 Cts/S 54188.	Y_3774 Cts/S 5589.7								
#1	3190.6	54088.	5569.9								
#2	3198.7	54288.	5609.4								

Sample Name: CCB Acquired: 5/28/2015 16:48:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm .00038	Al1670 ppm -.00096	As1890 ppm -.00097	B_2089 ppm .00225	Ba4554 ppm -.00035	Be3130 ppm .00013	Bi2230 ppm -.00292	Ca3179 ppm .00045	Cd2288 ppm .00020	Co2286 ppm -.00013	Cr2055 ppm .00011	Cu3247 ppm -.00029	Fe2599 ppm -.00256
Stddev	.00019	.00019	.00175	.00020	.00015	.00007	.00351	.00033	.00005	.00010	.00020	.00014	.00011
%RSD	49.361	19.447	181.08	8.7050	42.511	54.803	120.43	73.961	25.119	75.139	188.36	47.592	4.3816
#1	.00052	-.00083	.00027	.00211	-.00045	.00018	-.00540	.00068	.00024	-.00006	.00025	-.00039	-.00264
#2	.00025	-.00110	-.00221	.00238	-.00024	.00008	-.00043	.00021	.00016	-.00020	-.00004	-.00019	-.00248

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	K_7664 ppm .07494	Li6707 ppm .00182	Mg2790 ppm .00548	Mn2576 ppm .00006	Mo2020 ppm .00001	Na5895 ppm .14617	Ni2316 ppm -.00024	P_1782 ppm -.00281	Pb2203 ppm -.00118	S_1820 ppm .00470	Sb2068 ppm .00201	Se1960 ppm .00324	Si2881 ppm .02757
Stddev	.00693	.00048	.00128	.00003	.00003	.01537	.00010	.00245	.00070	.00263	.00357	.00031	.00489
%RSD	9.2534	26.288	23.410	46.273	250.02	10.515	44.143	87.319	59.292	55.992	177.82	9.4924	17.745
#1	.07004	.00216	.00457	.00004	-.00001	.15704	-.00016	-.00454	-.00069	.00657	.00453	.00303	.02411
#2	.07985	.00148	.00638	.00008	.00004	.13530	-.00031	-.00107	-.00168	.00284	-.00052	.00346	.03103

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	SiO2 ppm .05899	Sn1899 ppm -.00067	Sr4077 ppm .00006	Th2837 ppm .00090	Ti3349 ppm -.00017	TI1908 ppm .00007	U_3701 ppm -.01857	V_2924 ppm -.00049	Zn2062 ppm .00006	Zr3391 ppm .00283			
Avg	.01047	.00008	.00006	.00079	.00016	.00028	.02484	.00047	.00068	.00097			
Stddev	.017.45	11.381	100.95	87.601	93.961	392.03	133.76	95.785	1122.7	34.195			
#1	.05159	-.00061	.00011	.00146	-.00006	-.00013	-.03613	-.00083	-.00042	.00352			
#2	.06640	-.00072	.00002	.00034	-.00029	.00027	-.00101	-.00016	.00054	.00215			

Check ? High Limit Low Limit	Chk Pass												
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Int. Std. Units	Y_2243 Cts/S 3172.9	Y_3600 Cts/S 55142.	Y_3774 Cts/S 5573.3										
Avg	1.4	24.	90.4										
Stddev	.04446	.04376	1.6215										
#1	3171.9	55159.	5637.2										
#2	3173.9	55125.	5509.4										

Sample Name: CCVL3296658 Acquired: 5/28/2015 16:50:46 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00047	F -.00116	F -.00306	F .00183	F .00184	F .00028	F -.00433	F .04103	F .00013	F -.00020	F -.00025
Stddev	.00046	.00071	.00834	.00021	.00267	.00038	.00464	.05448	.00015	.00037	.00000
%RSD	96.571	60.634	272.56	11.556	145.63	138.99	107.13	132.80	110.90	186.35	.17641
#1	.00015	-.00066	.00284	.00168	.00373	.00055	-.00105	.07955	.00003	-.00046	-.00025
#2	.00080	-.00166	-.00896	.00197	-.00005	.00000	-.00761	.00250	.00024	.00006	-.00025
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00052	F .02251	F .74778	F .00422	F .00199	F .00001	F -.00028	F .37344	F .00063	F -.00061	F -.00065
Stddev	.00021	.02841	.92549	.00205	.00026	.00002	.00042	.32944	.00009	.00072	.00117
%RSD	39.338	126.20	123.77	48.656	13.013	390.10	150.90	88.217	14.147	118.18	180.47
#1	-.00038	.04260	1.4022	.00567	.00181	-.00001	-.00058	.60638	.00069	-.00112	-.00148
#2	-.00067	.00242	.09335	.00277	.00217	.00002	.00002	.14049	.00057	-.00010	.00018
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	.00582	F -.00146	F -.00133	F .10811	F .23135	F .00046	F .00214	F .00028	F .00005	F .00167	F -.03996
Stddev	.00248	.00065	.00028	.17220	.36851	.00045	.00301	.00122	.00014	.00116	.03154
%RSD	42.633	44.217	20.914	159.28	159.28	98.636	140.37	441.48	274.91	69.595	78.931
#1	.00757	-.00100	-.00114	.22987	.49193	.00078	.00427	.00114	.00015	.00085	-.01766
#2	.00406	-.00192	-.00153	-.01366	-.02922	.00014	.00002	-.00059	-.00005	.00249	-.06226
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00071	F -.00040	F .00215								
Stddev	.00035	.00011	.00563								
%RSD	49.981	28.729	262.18								
#1	-.00096	-.00032	.00612								
#2	-.00046	-.00048	-.00183								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243	Y_3600	Y_3774								
Avg	3239.8	55645.	5539.0								
Stddev	.9	19.	29.6								
%RSD	.02747	.03393	.53355								
#1	3239.2	55631.	5518.1								
#2	3240.4	55658.	5559.9								

Sample Name: 280-69622-C-2-B Acquired: 5/28/2015 16:53:01 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	-.00082	-.00341	.00124	.08954	-.00001	-.00343	81.559	.00019
Stddev	.00006	.00007	.00192	.00050	.00016	.00004	.00010	.522	.00026
%RSD	9.6051	8.5437	56.430	40.545	.17377	478.19	3.0201	.63983	133.38
#1	.00061	-.00077	-.00477	.00160	.08965	-.00004	-.00350	81.190	.00037
#2	.00054	-.00087	-.00205	.00089	.08943	.00002	-.00335	81.928	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	-.00006	-.00014	.01557	6.4376	.03579	.65971	.00006	-.00014
Stddev	.00021	.00000	.00010	.00146	.1034	.00248	.91582	.00003	.00007
%RSD	438.50	8.5130	72.812	9.3688	1.6062	6.9412	138.82	46.506	50.056
#1	.00010	-.00006	-.00007	.01453	6.3645	.03755	1.3073	.00009	-.00019
#2	-.00019	-.00005	-.00021	.01660	6.5107	.03404	.01213	.00004	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	115.42	.00074	-.00084	W -.00312	.00628	.00177	-.00137	7.2705	15.559
Stddev	.05	.00034	.00203	.00127	.00047	.00293	.00142	.0077	.016
%RSD	.04606	46.223	242.21	40.709	7.4226	165.41	103.62	.10555	.10555
#1	115.38	.00099	.00060	-.00402	.00661	-.00030	-.00037	7.2651	15.547
#2	115.45	.00050	-.00227	-.00222	.00595	.00385	-.00238	7.2759	15.571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.90198	-.00134	-.00034	.00227	-.01974	.00036	-.00049	-.00030
Stddev	.00003	.00316	.00167	.00018	.00023	.00438	.00049	.00019	.00065
%RSD	12.520	.34979	124.59	53.620	9.9757	22.185	135.64	38.784	214.85
#1	.00028	.89975	-.00252	-.00021	.00243	-.01664	.00071	-.00036	.00016
#2	.00023	.90421	-.00016	-.00047	.00211	-.02284	.00001	-.00063	-.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3203.9	54885.	5550.3						
Stddev	14.9	136.	118.1						
%RSD	.46380	.24816	2.1271						
#1	3193.4	54788.	5633.8						
#2	3214.4	54981.	5466.8						

Sample Name: 280-69622-C-3-B Acquired: 5/28/2015 16:55:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00546	-.00317	.10487	.09091	.00000	-.00111	84.327	.00019
Stddev	.00016	.00102	.00557	.00035	.00023	.00007	.00008	.483	.00023
%RSD	101.96	18.674	175.82	.33355	.25104	2703.2	7.2066	.57272	123.43
#1	.00026	.00618	.00077	.10511	.09075	-.00005	-.00116	84.669	.00035
#2	.00004	.00474	-.00710	.10462	.09107	.00005	-.00105	83.986	.00002
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.00032	.00201	.00563	6.5800	.03523	17.785	.00065	-.00028
Stddev	.00046	.00037	.00005	.00003	.0112	.00012	.041	.00000	.00004
%RSD	161.29	113.48	2.5027	.52503	.17037	.34871	.23017	.51554	14.356
#1	-.00061	.00058	.00198	.00565	6.5879	.03531	17.814	.00065	-.00025
#2	.00004	.00006	.00205	.00561	6.5720	.03514	17.757	.00065	-.00030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	116.18	.00532	.07566	.00420	58.878	.00360	.00731	7.4157	15.870
Stddev	.19	.00034	.00585	.00008	.152	.00294	.00011	.0165	.035
%RSD	.16724	6.4086	7.7348	1.9096	.25864	81.638	1.5397	.22286	.22286
#1	116.05	.00556	.07980	.00415	58.986	.00568	.00723	7.4040	15.845
#2	116.32	.00507	.07152	.00426	58.771	.00152	.00739	7.4274	15.895
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00136	.91887	-.00135	.00002	-.00520	.00361	.00180	.00191	.00028
Stddev	.00019	.00579	.00060	.00056	.00077	.02724	.00023	.00004	.00072
%RSD	14.333	.63035	44.652	3537.8	14.794	754.78	12.506	2.2764	260.74
#1	.00122	.92297	-.00092	-.00038	-.00574	.02287	.00196	.00188	.00078
#2	.00150	.91477	-.00177	.00042	-.00466	-.01565	.00164	.00194	-.00023
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3089.0	52181.	5404.6						
Stddev	8.1	209.	29.3						
%RSD	.26369	.40093	.54191						
#1	3083.3	52033.	5383.9						
#2	3094.8	52329.	5425.3						

Sample Name: 280-69624-B-1-B Acquired: 5/28/2015 16:58:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.79797	-.00285	.01304	.04729	-.00004	-.00106	13.672	.00012
Stddev	.00028	.00008	.00247	.00002	.00016	.00012	.00016	.020	.00010
%RSD	86.106	.01027	86.745	.14001	.34152	331.78	14.777	.14721	77.035
#1	.00013	.79803	-.00460	.01305	.04718	-.00012	-.00117	13.658	.00019
#2	.00052	.79791	-.00110	.01302	.04740	.00005	-.00095	13.686	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.00067	.00407	.37569	3.4167	.00699	5.7491	.00185	.00033
Stddev	.00005	.00012	.00006	.00108	.0729	.00058	.0426	.00007	.00028
%RSD	45.068	17.517	1.5580	.28842	2.1332	8.2489	.74166	3.7874	84.044
#1	-.00016	.00058	.00412	.37645	3.4683	.00659	5.7793	.00180	.00052
#2	-.00008	.00075	.00403	.37492	3.3652	.00740	5.7190	.00190	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.601	.00255	.01815	.00073	27.849	.00136	.00688	2.9362	6.2835
Stddev	.289	.00015	.00105	.00144	.010	.00074	.00053	.0042	.0089
%RSD	.78964	5.9418	5.7926	196.55	.03627	54.396	7.7732	.14189	.14189
#1	36.396	.00244	.01889	-.00028	27.856	.00084	.00725	2.9333	6.2772
#2	36.805	.00266	.01740	.00175	27.841	.00188	.00650	2.9391	6.2898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00154	.28997	.00129	.06579	-.00031	-.03030	.00152	.00291	.00223
Stddev	.00010	.00057	.00052	.00042	.00014	.00650	.00030	.00039	.00241
%RSD	6.7308	.19633	40.722	.64485	45.908	21.468	19.444	13.254	108.10
#1	.00161	.28957	.00166	.06549	-.00021	-.03490	.00173	.00264	.00393
#2	.00146	.29037	.00092	.06609	-.00042	-.02570	.00131	.00318	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3178.0	54545.	5640.1						
Stddev	3.3	255.	50.6						
%RSD	.10272	.46709	.89668						
#1	3180.4	54725.	5604.3						
#2	3175.7	54365.	5675.8						

Sample Name: 280-69624-B-2-B Acquired: 5/28/2015 17:00:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.26344	-.00173	.01252	.07468	.00012	-.00287	28.946	.00033
Stddev	.00058	.00022	.00007	.00010	.00173	.00022	.00032	.670	.00005
%RSD	197.82	.08455	3.8343	.78692	2.3129	178.86	11.047	2.3162	14.017
#1	-.00012	.26329	-.00178	.01259	.07346	.00028	-.00265	28.472	.00029
#2	.00070	.26360	-.00168	.01245	.07591	-.00003	-.00309	29.420	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	.00035	.00215	.23398	2.1342	.00652	5.7329	.00289	-.00053
Stddev	.00019	.00012	.00046	.00430	.0110	.00142	.0056	.00006	.00016
%RSD	171.99	33.168	21.450	1.8370	.51733	21.804	.09743	2.2057	30.627
#1	.00002	.00043	.00248	.23094	2.1264	.00552	5.7290	.00284	-.00041
#2	-.00025	.00027	.00182	.23702	2.1421	.00753	5.7369	.00293	-.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.119	W 10.611	.00360	.02423	.00039	11.682	.00071	.00703	5.8468
Stddev	.224	.184	.00039	.00285	.00004	.177	.00261	.00171	.1581
%RSD	2.2152	1.7348	10.708	11.781	10.464	1.5122	366.88	24.259	2.7045
#1	9.9610	10.741	.00388	.02625	.00036	11.557	.00255	.00583	5.7350
#2	10.278	10.481	.00333	.02221	.00041	11.807	-.00113	.00824	5.9586
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.512	.00060	.23537	.00003	.01398	-.00330	.00154	.00170	.00139
Stddev	.338	.00123	.00502	.00058	.00048	.00227	.01481	.00011	.00031
%RSD	2.7045	204.38	2.1338	1767.4	3.4432	68.822	958.36	6.6957	22.385
#1	12.273	.00147	.23181	.00044	.01432	-.00490	.01201	.00178	.00117
#2	12.751	-.00027	.23892	-.00038	.01364	-.00169	-.00892	.00162	.00161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.00268								
Stddev	.00106								
%RSD	39.490								
#1	.00342								
#2	.00193								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69624-B-2-B Acquired: 5/28/2015 17:00:43 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279213 200.7 (Al Fe Mn Zn)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3203.0	55106.	5615.2
Stddev	10.9	25.	104.3
%RSD	.33932	.04540	1.8578
#1	3195.3	55089.	5689.0
#2	3210.7	55124.	5541.4

Sample Name: 280-69624-B-3-B Acquired: 5/28/2015 17:03:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.03414	-.00064	.01075	.07678	.00012	-.00309	28.425	.00020
Stddev	.00058	.00019	.00099	.00042	.00005	.00006	.00317	.011	.00003
%RSD	219.80	.54756	155.30	3.8717	.06641	51.143	102.46	.04017	16.961
#1	.00067	.03427	-.00134	.01045	.07675	.00007	-.00533	28.417	.00022
#2	-.00015	.03401	.00006	.01104	.07682	.00016	-.00085	28.433	.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.00035	.00202	.06566	1.9146	.00572	5.6233	.00285	-.00046
Stddev	.00020	.00011	.00038	.00318	.0207	.00045	.0734	.00000	.00002
%RSD	151.93	31.648	18.607	4.8362	1.0827	7.8091	1.3048	.11044	3.7357
#1	-.00027	.00027	.00228	.06342	1.9292	.00541	5.5714	.00284	-.00045
#2	.00001	.00043	.00175	.06791	1.8999	.00604	5.6752	.00285	-.00047
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.1152	.00309	.03320	.00163	9.9498	.00193	.00358	5.5012	11.773
Stddev	.0067	.00002	.00133	.00109	.0020	.00218	.00512	.0282	.060
%RSD	.08314	.61872	4.0130	66.509	.01993	112.83	142.73	.51188	.51188
#1	8.1104	.00310	.03414	.00086	9.9484	.00347	-.00003	5.4813	11.730
#2	8.1199	.00308	.03226	.00240	9.9512	.00039	.00720	5.5211	11.815
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.26254	-.00100	.00308	-.00469	-.00542	.00124	.00069	.00242
Stddev	.00051	.00017	.00112	.00018	.00223	.01204	.00067	.00012	.00043
%RSD	452.11	.06566	111.47	5.8361	47.588	222.16	54.047	16.957	17.655
#1	-.00025	.26242	-.00021	.00321	-.00627	-.01393	.00171	.00078	.00272
#2	.00047	.26266	-.00180	.00295	-.00311	.00309	.00076	.00061	.00212
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3228.0	54389.	5434.4						
Stddev	15.6	452.	15.7						
%RSD	.48257	.83048	.28809						
#1	3217.0	54070.	5423.4						
#2	3239.0	54709.	5445.5						

Sample Name: 280-69624-B-4-B Acquired: 5/28/2015 17:05:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279213 200.7 (Al Fe Mn Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00092	5.8108	.00224	.01492	.06389	.00013	-.00553	5.9166	.00042
#2	-.00096	5.8450	-.00436	.01520	.06389	.00028	-.00156	5.9073	.00019
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00035	.00366	.00677	1.6817	4.7244	.00787	2.6710	.00757	.00056
#2	.00003	.00335	.00613	1.6963	4.7087	.00616	2.6953	.00760	.00020
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	20.486	.00283	.06178	-.00185	6.6092	.00091	.00771	11.047	23.640
#2	20.166	.00270	.06337	-.00114	6.5896	-.00098	.00640	11.099	23.751
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00041	.19159	.00089	.20428	-.00028	-.01471	.00800	.01081	.00346
#2	.00030	.19030	.00291	.20529	-.00049	-.03409	.00962	.01059	.01046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3224.1	55117.	5530.0						
#2	3236.7	54952.	5602.7						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 17:08:22 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00629	Al3092 ppm 47.755	As1890 ppm -.00984	B_2089 ppm .00165	Ba4554 ppm .00061	Be3130 ppm .00020	Bi2230 ppm 1.0348	Ca3179 ppm .02554	Cd2288 ppm -.00008	Co2286 ppm -.00047	Cr2055 ppm .00055
#1	-.00678	47.630	-.00829	.00173	.00058	.00021	1.0370	.02240	-.00010	-.00048	.00071
#2	-.00580	47.881	-.01140	.00156	.00064	.00018	1.0326	.02867	-.00006	-.00046	.00039
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00017	Fe2714 ppm 47.202	K_7664 ppm .11875	Li6707 ppm .00294	Mg2790 ppm .05957	Mn2576 ppm -.00165	Mo2020 ppm -.00043	Na8183 ppm 246.99	Ni2316 ppm .00243	P_1782 ppm .00568	Pb2203 ppm .00012
#1	-.00019	47.143	.10634	.00212	.05607	-.00165	-.00052	246.94	.00286	.00446	.00019
#2	-.00015	47.262	.13116	.00375	.06307	-.00166	-.00035	247.04	.00199	.00689	.00005
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.1013	Sb2068 ppm -.01083	Se1960 ppm .01557	Si2881 ppm -.00772	SiO2 ppm -.01653	Sn1899 ppm -.00249	Sr4077 ppm .00036	Th2837 ppm 5.0311	Ti3349 ppm -.01187	TI1908 ppm .00055	U_3701 ppm W 10.570
#1	5.0933	-.00929	0.1707	.00337	.00721	-.00177	.00044	5.0350	-.01195	.00067	10.620
#2	5.1093	-.01237	.01407	-.01881	-.04026	-.00320	.00027	5.0272	-.01180	.00043	10.520
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00275	Zn2062 ppm -.00058	Zr3391 ppm -.14263								
#1	.00265	-.00054	-.14416								
#2	.00285	-.00063	-.14110								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3170.6	Y_3600 Cts/S 53219.	Y_3774 Cts/S 5604.0								
#1	3162.1	53151.	5588.9								
#2	3179.1	53287.	5619.1								

Sample Name: CCV-3290307 Acquired: 5/28/2015 17:10:53 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .47753	Al1670 ppm .51461	As1890 ppm .99538	B_2089 ppm .51664	Ba4554 ppm .46280	Be3130 ppm W .44927	Bi2230 ppm -.00384	Ca3179 ppm 4.5279	Cd2288 ppm .50978	Co2286 ppm .49441	Cr2055 ppm .48719
#1	.47850	.51572	.99995	.52004	.46391	.44975	-.00252	4.5277	.51105	.49653	.48890
#2	.47656	.51349	.99082	.51324	.46168	.44879	-.00516	4.5281	.50850	.49229	.48548
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .50000 -10.000%	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .48238	Fe2599 ppm 2.2575	K_7664 ppm 47.604	Li6707 ppm .94685	Mg2790 ppm 19.126	Mn2576 ppm .50535	Mo2020 ppm .48694	Na5895 ppm 5.0001	Ni2316 ppm .49474	P_1782 ppm 1.0283	Pb2203 ppm .98893
#1	.48209	2.2643	47.724	.94850	19.101	.50452	.48912	5.0128	.49776	1.0373	.99587
#2	.48268	2.2507	47.483	.94521	19.152	.50619	.48476	4.9873	.49171	1.0193	.98198
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .00808	Sb2068 ppm 1.0079	Se1960 ppm 1.0006	Si2881 ppm 4.5921	SiO2 ppm 9.8270	Sn1899 ppm .98847	Sr4077 ppm .46427	Th2837 ppm -.00311	Ti3349 ppm .49310	Tl1908 ppm 1.0166	U_3701 ppm -.03431
#1	.00538	1.0144	1.0029	4.5971	9.8379	.99329	.46529	-.00210	.49091	1.0219	-.03546
#2	.01078	1.0014	.99834	4.5870	9.8162	.98365	.46325	-.00411	.49529	1.0112	-.03317
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .51734	Zn2062 ppm .49874	Zr3391 ppm .45409								
#1	.51637	.49891	.45145								
#2	.51832	.49857	.45673								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3229.8	Y_3600 Cts/S 55015.	Y_3774 Cts/S 5694.6								
#1	3224.7	55097.	5654.7								
#2	3234.9	54932.	5734.6								

Sample Name: CCB Acquired: 5/28/2015 17:13:17 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	-.00072	W -.00507	.00123	-.00018	.00007	-.00390	-.00681	.00028	-.00026	-.00044
Stddev	.00022	.00002	.00218	.00027	.00008	.00004	.00209	.00136	.00007	.00014	.00010
%RSD	26.113	2.1217	42.918	22.261	45.787	54.800	53.633	20.033	23.614	54.282	22.010
#1	.00069	-.00071	-.00661	.00103	-.00012	.00004	-.00242	-.00584	.00023	-.00016	-.00051
#2	.00100	-.00073	-.00353	.00142	-.00023	.00010	-.00538	-.00777	.00033	-.00036	-.00037
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	-.00194	.08460	.00060	.00357	-.00004	.00026	.12029	.00057	-.00048	-.00067
Stddev	.00088	.00102	.01520	.00122	.00107	.00012	.00001	.00373	.00041	.00205	.00041
%RSD	230.62	52.830	17.971	204.15	29.849	284.71	5.1504	3.0968	70.944	424.57	61.443
#1	.00024	-.00121	.09535	-.00026	.00433	.00004	.00027	.12292	.00086	-.00194	-.00038
#2	-.00100	-.00266	.07385	.00146	.00282	-.00013	.00025	.11765	.00029	-.00097	-.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00290	.00287	.00384	.00998	.02136	-.00040	.00005	-.00121	-.00005	.00153	-.00402
Stddev	.00056	.00425	.00160	.00031	.00066	.00174	.00009	.00242	.00007	.00226	.00744
%RSD	19.202	148.02	41.681	3.1009	3.1009	436.76	169.35	199.29	146.46	148.10	185.05
#1	.00329	-.00013	.00271	.00976	.02089	-.00163	.00011	.00050	.00000	.00312	.00124
#2	.00251	.00588	.00498	.01020	.02183	.00083	-.00001	-.00293	-.00009	-.00007	-.00928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00022	.00001	.00145								
Stddev	.00012	.00001	.00072								
%RSD	54.963	91.227	49.453								
#1	-.00030	.00001	.00095								
#2	-.00013	.00002	.00196								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3242.8	55750.	5692.5								
Stddev	26.1	160.	41.0								
%RSD	.80405	.28704	.71967								
#1	3224.3	55637.	5663.6								
#2	3261.2	55863.	5721.5								

Sample Name: CCVL3296658 Acquired: 5/28/2015 17:15:34 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00016	F -.00057	F -.00547	F .00066	F .00207	F .00025	F -.00470	F .04398	F .00037	F -.00021	F -.00034
Stddev	.00021	.00001	.00040	.00011	.00287	.00031	.00150	.05825	.00009	.00008	.00002
%RSD	130.12	1.6237	7.2930	16.223	138.38	123.70	31.844	132.46	24.636	39.879	4.9150
#1	.00031	-.00058	-.00576	.00073	.00410	.00048	-.00364	.08517	.00031	-.00015	-.00032
#2	.00001	-.00056	-.00519	.00058	.00004	.00003	-.00576	.00279	.00044	-.00027	-.00035
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00074	F .02072	F .71537	F .00263	F .00129	F -.00001	F .00000	F .33443	F .00061	F -.00216	F -.00030
Stddev	.00056	.03084	.90145	.00270	.00028	.00007	.00011	.31009	.00027	.00043	.00044
%RSD	75.307	148.85	126.01	102.83	21.638	711.30	96028.	92.723	44.771	20.120	146.81
#1	-.00035	.04252	1.3528	.00454	.00109	.00004	.00008	.55369	.00042	-.00185	.00001
#2	-.00114	-.00109	.07795	.00072	.00148	-.00006	-.00008	.11516	.00080	-.00247	-.00061
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.00478	F .00122	F .00619	F .10389	F .22233	F -.00061	F .00208	F .00069	F -.00003	F .00220	F -.00951
Stddev	.00397	.00014	.00029	.13031	.27887	.00063	.00299	.00244	.00011	.00027	.05248
%RSD	82.982	11.841	4.7450	125.43	125.43	102.37	143.31	354.01	402.35	12.195	552.00
#1	.00759	.00112	.00640	.19604	.41952	-.00105	.00420	.00241	-.00010	.00201	-.04661
#2	.00198	.00132	.00598	.01175	.02514	-.00017	-.00003	-.00104	.00005	.00239	.02760
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00027	F .00017	F .00431								
Stddev	.00035	.00012	.00542								
%RSD	129.87	72.824	125.79								
#1	-.00051	.00025	.00814								
#2	-.00002	.00008	.00048								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243	Y_3600	Y_3774								
Avg	3340.8	57687.	5671.1								
Stddev	11.7	166.	43.4								
%RSD	.35167	.28701	.76506								
#1	3349.1	57570.	5701.8								
#2	3332.5	57804.	5640.4								

Sample Name: MB 280-279239/1-A Acquired: 5/28/2015 17:17:50 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: 5/28 Custom ID2: Custom ID3:
 Comment: 279239 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	-.00094	-.00485	.00024	-.00004	.00008	-.00283	.04122	.00014
Stddev	.00031	.00039	.00577	.00094	.00010	.00003	.00132	.00259	.00007
%RSD	327.22	41.356	119.07	389.71	236.92	40.995	46.501	6.2853	49.306
#1	.00032	-.00121	-.00077	.00091	-.00011	.00010	-.00190	.03938	.00009
#2	-.00013	-.00066	-.00893	-.00043	.00003	.00006	-.00377	.04305	.00019
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.00000	-.00070	.00348	.07381	.00195	.00387	-.00004	-.00021
Stddev	.00001	.0000	.00011	.00156	.06341	.00197	.00034	.00004	.00011
%RSD	11.554	583.61	16.344	44.878	85.911	100.74	8.6688	84.435	50.828
#1	-.00012	.00001	-.00062	.00459	.11864	.00056	.00364	-.00002	-.00029
#2	-.00014	-.00002	-.00078	.00238	.02897	.00335	.00411	-.00007	-.00014
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17380	.00015	-.00064	.00084	.00524	.00121	.00315	.04153	.08888
Stddev	.00838	.00020	.00095	.00079	.00180	.00095	.00491	.00159	.00340
%RSD	4.8238	128.56	147.01	93.775	34.341	78.176	155.86	3.8292	3.8292
#1	.16787	.00029	.00003	.00028	.00651	.00188	.00662	.04266	.09129
#2	.17973	.00001	-.00132	.00140	.00396	.00054	-.00032	.04041	.08648
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	.00012	-.00103	.00008	.00043	-.01040	-.00040	.00037	.00176
Stddev	.0017	.00006	.00082	.00009	.00257	.00735	.00055	.00027	.00111
%RSD	42318.	49.803	79.410	125.75	604.46	70.646	136.85	72.012	62.978
#1	.00120	.00008	-.00045	.00001	.00224	-.01559	-.00001	.00018	.00255
#2	-.00121	.00016	-.00161	.00014	-.00139	-.00520	-.00079	.00056	.00098
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3276.2	56546.	5728.6						
Stddev	.4	81.	65.9						
%RSD	.01098	.14243	1.1504						
#1	3275.9	56603.	5775.2						
#2	3276.4	56489.	5682.0						

Sample Name: LCS 280-279239/2-A Acquired: 5/28/2015 17:20:06 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00093	F -.00143	F -.00318	F .00088	1.8390	.04527	.00007	F 43.773	F .00029
Stddev	.00830	.00083	.00384	.00144	.0126	.00041	.00303	.379	.00013
%RSD	890.24	58.372	120.68	164.45	.68353	.91473	4282.9	.86631	45.955
#1	.00680	-.00084	-.00047	.00189	1.8479	.04557	.00221	44.042	.00039
#2	-.00494	-.00202	-.00589	-.00014	1.8302	.04498	-.00207	43.505	.00020
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Fail	Chk Fail
High Limit	.05750	2.2299	1.1050	1.1050				55.500	.11100
Low Limit	.04275	1.7300	.87500	.86000				44.750	.08800
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00047	F .00009	F .03056	.89266	47.680	.94487	F 5.5055	F .05855	F .00041
Stddev	.00004	.00023	.03919	.00479	.354	.00446	7.7243	.08218	.00056
%RSD	9.4848	247.51	128.23	.53637	.74222	.47150	140.30	140.37	137.87
#1	-.00050	.00025	.05828	.88928	47.931	.94802	10.967	.11666	.00081
#2	-.00044	-.00007	.00285	.89605	47.430	.94172	.04359	.00043	.00001
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit	.55500	.05750	.28000				56.500	.55000	.1.1000
Low Limit	.44500	.04275	.21500				46.000	.45000	.90000
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.706	F .00065	F -.00034	F -.00391	.00284	F .00340	F .00428	9.0926	19.458
Stddev	.498	.00015	.00184	.00004	.00153	.00185	.00062	.0386	.083
%RSD	.98132	23.215	538.96	.91967	53.709	54.411	14.383	.42496	.42496
#1	50.354	.00075	.00096	-.00393	.00176	.00470	.00384	9.1199	19.517
#2	51.058	.00054	-.00164	-.00388	.00392	.00209	.00471	9.0653	19.400
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Pass	None
High Limit	.55500	.55500	11.100	.55000		.55499	2.2400		
Low Limit	.44500	.44500	9.1000	.44500		.44000	1.7000		
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00012	.92001	F .10576	F .11511	F .00169	F .23704	F .05802	F .05568	.46817
Stddev	.00085	.00502	.16276	.16218	.00164	.34479	.08269	.07856	.00612
%RSD	723.09	.54598	153.89	140.89	96.629	145.46	142.51	141.10	1.3071
#1	.00072	.92356	.22085	.22979	.00285	.48084	.11649	.11122	.46384
#2	-.00048	.91646	-.00932	.00043	.00054	-.00676	-.00045	.00013	.47250
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass				
High Limit	2.2600		1.2000	1.1100	2.2000	2.3000	.55500	.55500	
Low Limit	1.7000		.80000	.90000	1.7600	1.7000	.45000	.42500	
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3308.9	57499.	5594.6						
Stddev	8.3	825.	115.0						
%RSD	.25129	1.4346	2.0560						
#1	3303.0	56915.	5513.3						
#2	3314.7	58082.	5675.9						

Sample Name: 280-69839-B-1-A Acquired: 5/28/2015 17:22:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	10.778	.00064	.29216	.22313	.00087	-.00357	103.09	.00127
Stddev	.00036	.039	.00165	.00045	.00089	.00002	.00166	.28	.00009
%RSD	120.44	.36015	258.41	.15410	.39818	2.8214	46.506	.26935	6.7945
#1	.00055	10.806	.00180	.29184	.22250	.00088	-.00475	102.89	.00133
#2	.00004	10.751	-.00053	.29247	.22375	.00085	-.00240	103.29	.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00441	.03606	.03368	11.231	22.047	.16208	20.876	.94330	.00507
Stddev	.00006	.00039	.00050	.019	.007	.00091	.037	.00186	.00056
%RSD	1.3681	1.0780	1.4803	.16908	.03104	.56195	.17658	.19718	11.107
#1	.00437	.03634	.03403	11.218	22.042	.16144	20.902	.94462	.00467
#2	.00446	.03579	.03332	11.245	22.052	.16273	20.850	.94199	.00547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.643	.01776	.74371	.03220	34.369	.00625	.00721	25.922	55.474
Stddev	.008	.00012	.00199	.00072	.062	.00338	.00483	.030	.064
%RSD	.02809	.65576	.26716	2.2349	.18015	.54.060	66.892	.11512	.11512
#1	28.638	.01767	.74231	.03169	34.325	.00386	.00380	25.944	55.519
#2	28.649	.01784	.74512	.03271	34.412	.00864	.01063	25.901	55.429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00238	.69779	.00658	.32375	-.00926	-.04216	.05641	.16583	.00803
Stddev	.00004	.00250	.00103	.00195	.00230	.02008	.00090	.00099	.00031
%RSD	1.5352	.35764	15.603	.60311	24.806	47.626	1.5976	.59718	3.8704
#1	.00240	.69602	.00585	.32513	-.00764	-.02796	.05577	.16654	.00825
#2	.00235	.69955	.00731	.32237	-.01088	-.05636	.05704	.16513	.00781
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3270.7	55814.	5905.7						
Stddev	4.2	156.	7.8						
%RSD	.12728	.28013	.13189						
#1	3267.8	55703.	5900.2						
#2	3273.7	55924.	5911.2						

Sample Name: 280-69747-C-1-A Acquired: 5/28/2015 17:25:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00045	4.0570	-.00249	.03563	.16976	.00006	-.00400	2.4009	.00022
#2	.00058	4.1596	-.00581	.03342	.17270	.00012	-.00163	2.4250	.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00046	.00379	.00930	.89755	4.1198	.01227	.89092	.00371	.00034
#2	-.00084	.00399	.00909	.91152	4.1857	.01415	.87721	.00330	-.00016
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	416.06	.00258	.02992	-.00131	.86191	.00103	.00446	10.159	21.741
#2	5.21	.00024	.00506	.00071	.00468	.00006	.00240	.123	.262
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00025	.20615	.00309	.10382	-.00055	-.03794	.00579	.01176	.00255
#2	.00047	.21032	-.00143	.10127	.00171	.01729	.00577	.00970	.00648
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3140.7	52973.	5670.5						
#2	3148.1	53020.	5542.8						

Sample Name: 280-69840-A-1-A Acquired: 5/28/2015 17:27:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00060	.01546	.00242	.24745	.05361	.00026	-.00172	78.384	-.00002
#2	-.00039	.01433	-.00803	.24914	.05291	.00003	-.00675	77.284	.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00052	.00058	.00288	.04572	13.404	.02566	19.743	.05103	.00814
#2	-.00018	.00070	.00378	.04339	13.299	.02709	19.672	.05117	.00715
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	164.61	.00548	.02404	.00287	57.841	.00045	.00533	5.5453	11.867
#2	162.28	.00586	.02586	.00455	57.878	-.00097	.00283	5.5269	11.828
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00084	.68261	.00047	.00000	-.00562	-.00561	-.00086	.00035	.00341
#2	-.00070	.67303	-.00013	.00058	-.00775	-.00477	-.00101	.00078	.00109
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3135.5	53635.	5792.4						
#2	3158.2	53979.	5858.7						

Sample Name: 280-69710-E-1-A Acquired: 5/28/2015 17:30:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00044	.02414	-.00017	3.6004	.09351	.00020	-.00440	82.173	.00059
#2	.00054	.02314	-.00365	3.5961	.09589	-.00001	-.00058	84.522	.00044
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00731	.00508	.02187	.39404	64.939	.00649	47.787	1.1427	-.00160
#2	.00720	.00529	.02132	.41103	66.920	.00516	47.859	1.1410	-.00065
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	455.38	.06161	.32377	.00398	69.608	.00363	.00639	8.3060	17.775
#2	469.47	.06291	.32394	.00308	69.609	.00870	.01284	8.6875	18.591
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00064	.95802	.00185	.00292	-.00721	-.06355	.00513	.03814	.00246
#2	.00054	.98420	-.00090	.00297	-.00535	-.05158	.00563	.03772	.00108
Check ? High Limit Low Limit	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3045.9	51536.	5792.6						
#2	3049.4	51508.	5589.7						

Sample Name: 280-69710-E-1-A SD@5 Acquired: 5/28/2015 17:33:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00025	.00430	.00477	.74037	.01934	.00002	-.00155	16.866	.00000
#2	.00024	.00379	-.00043	.73953	.01829	-.00001	-.00592	16.789	.00000
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00116	.00128	.00485	.08805	13.310	.00228	9.6420	.22964	-.00030
#2	.00131	.00108	.00410	.08698	13.391	.00234	9.6609	.22908	-.00093
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	94.048	.01445	.06197	.00136	13.761	.00051	-.00175	1.7254	3.6924
#2	94.915	.01351	.06549	.00035	13.601	-.00128	.00389	1.7335	3.7097
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00020	.19393	-.00047	.00105	-.00040	.02908	.00006	.00773	.00246
#2	.00043	.19261	-.00038	-.00038	-.00190	-.02582	.00164	.00752	.00280
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3134.3	53556.	5528.7						
#2	3117.4	53616.	5524.2						

Sample Name: 280-69710-E-1-B MS Acquired: 5/28/2015 17:35:32 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04670	1.8492	.99567	4.5730	1.8866	.04422	1.9229	125.26	.10056
#2	.04396	1.8418	.99830	4.5898	1.9514	.04529	1.9482	129.62	.10135
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.46739	.17507	.26296	1.2448	112.97	.94854	94.582	1.6192	.98755
#2	.46882	.17805	.26350	1.2852	116.91	.98364	94.733	1.6164	.99072
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	503.49	.51562	10.928	.45859	71.430	.51687	2.0412	16.286	34.852
#2	523.04	.51675	11.019	.45673	72.046	.52141	2.0561	16.900	36.166
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9046	1.8577	.98119	.97609	1.7577	1.9327	.50990	.52142	.42165
#2	1.9107	1.9246	.97949	.97647	1.7618	1.9793	.50845	.51780	.44200
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2963.3	49865.	5391.4						
#2	2985.4	49949.	5195.4						

Sample Name: 280-69710-E-1-C MSD Acquired: 5/28/2015 17:37:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279239 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04529	1.8656	1.0040	4.6231	1.9518	.04497	1.9652	128.26	.10241
#2	.04627	1.8615	1.0103	4.6709	1.9310	.04511	1.9647	126.83	.10212
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.47144	.17838	.26612	1.2634	115.69	.97557	94.523	1.6199	.99626
#2	.47050	.17932	.26650	1.2728	114.18	.96647	94.648	1.6254	.99644
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	517.93	.51968	11.102	.46296	72.503	.52837	2.0623	16.162	34.587
#2	512.93	.51802	11.108	.45637	73.226	.52626	2.0306	16.354	34.997
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9109	1.9164	.98544	.98369	1.7692	2.0178	.51194	.51470	.42396
#2	1.8760	1.8956	.98838	.98246	1.7425	1.9737	.51362	.51433	.42828
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2974.6	51262.	5514.1						
#2	3002.8	50852.	5608.7						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 17:40:22 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00539	47.681	-.00687	.01041	.00060	.00015	1.0295	.05016	-.00028	-.00040	.00076	.00012	47.298
Stddev	.00137	.432	.00128	.00077	.00025	.00005	.0028	.00144	.00041	.00009	.00000	.00046	.152
%RSD	25.386	.90547	18.689	7.4242	41.092	31.663	.27298	2.8654	147.20	23.234	.25187	399.50	.32198
#1	-.00442	47.376	-.00778	.01095	.00043	.00018	1.0315	.04914	.00001	-.00047	.00076	-.00021	47.190
#2	-.00636	47.987	-.00597	.00986	.00078	.00012	1.0275	.05117	-.00057	-.00034	.00076	.00044	47.405

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.30473	.00302	.05835	.00148	-.00002	248.42	.00277	.00751	.00083	5.0531	-.01143	.00767	.01581
Stddev	.01665	.00019	.00893	.00009	.00023	3.73	.00013	.00121	.00037	.0319	.00109	.00033	.00707
%RSD	5.4649	6.4392	15.301	5.8491	1550.4	1.5012	4.6653	16.052	44.551	9.5565	4.3549	44.709	
#1	.31651	.00288	.05204	-.00142	.00015	245.78	.00286	.00666	.00109	5.0756	-.01066	.00790	.01081
#2	.29296	.00316	.06466	-.00154	-.00018	251.06	.00268	.00836	.00057	5.0306	-.01220	.00743	.02081

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.03384	-.00248	.00069	5.0397	-.01278	.00276	10.451	.00271	.00010	-.14036			
Stddev	.01513	.00018	.00002	.0091	.00056	.00318	.110	.00118	.00017	.00082			
%RSD	44.709	7.2535	2.6014	.18096	4.3854	115.30	1.0477	43.524	169.93	.58101			
#1	.02314	-.00235	.00068	5.0332	-.01318	.00501	10.374	.00187	.00022	-.13978			
#2	.04453	-.00261	.00071	5.0461	-.01239	.00051	10.528	.00354	-.00002	-.14094			

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3182.7	53387.	5529.2
Stddev	10.9	140.	51.5
%RSD			
#1	3175.0		53288.
#2	3190.5		53486.
	5565.6		5492.8

Sample Name: CCV-3290307 Acquired: 5/28/2015 17:42:53 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48319	.51421	1.0036	.52483	.47564	.45966	-.00582	4.6502	.51096	.50034	.49639	.48583	2.3197
Stddev	.00130	.00028	.0013	.00342	.00665	.00799	.00073	.0689	.00065	.00583	.00138	.00053	.0502
%RSD	.26848	.05528	.12639	.65081	1.3991	1.7392	12.632	1.4815	.12771	1.1649	.27878	.10853	2.1645
#1	.48411	.51401	1.0027	.52725	.47093	.45401	-.00530	4.6015	.51142	.50446	.49736	.48620	2.2842
#2	.48227	.51441	1.0045	.52242	.48035	.46532	-.00633	4.6989	.51049	.49622	.49541	.48546	2.3552
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.027	.97407	19.315	.50467	.49350	5.1859	.50027	1.0304	1.0082	.00923	1.0159	1.0124	4.7037
Stddev	.890	.01711	.015	.00027	.00570	.0862	.00673	.0119	.0053	.00389	.0117	.0145	.0821
%RSD	1.8150	1.7567	.07974	.05406	1.1542	1.6623	1.3454	1.1560	.52441	42.110	1.1470	1.4308	1.7463
#1	48.397	.96197	19.304	.50486	.49753	5.1249	.50503	1.0388	1.0120	.01198	1.0242	1.0226	4.6456
#2	49.656	.98617	19.326	.50448	.48947	5.2468	.49551	1.0219	1.0045	.00648	1.0077	1.0021	4.7617
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.066	1.0023	.47572	-.00375	.49426	1.0284	.00828	.51533	.50279	.46482			
Stddev	.176	.0105	.00766	.00117	.00074	.0071	.01425	.00188	.00517	.00693			
%RSD	1.7463	1.0472	1.6093	31.118	.14957	.69419	172.18	.36473	1.0290	1.4911			
#1	9.9415	1.0097	.47031	-.00293	.49373	1.0335	-.00180	.51400	.50645	.45992			
#2	10.190	.99485	.48114	-.00458	.49478	1.0234	.01835	.51666	.49913	.46972			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3242.9	55157.	5587.0										
Stddev	25.1	57.	104.0										
%RSD	.77368	.10297	1.8619										
#1	3225.1	55116.	5660.6										
#2	3260.6	55197.	5513.5										

Sample Name: CCB Acquired: 5/28/2015 17:45:18 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00023	Al1670 ppm -.00045	As1890 ppm W -.00639	B_2089 ppm .00503	Ba4554 ppm .00005	Be3130 ppm .00027	Bi2230 ppm -.00439	Ca3179 ppm .00774	Cd2288 ppm .00019	Co2286 ppm -.00026	Cr2055 ppm -.00010
#1	.00038	.00024	-.00781	.00580	.00047	.00038	-.00513	.01938	.00034	-.00018	.00005
#2	.00007	-.00115	-.00497	.00425	-.00036	.00016	-.00365	-.00390	.00004	-.00034	-.00025
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00033	Fe2599 ppm .00977	K_7664 ppm .16754	Li6707 ppm .00131	Mg2790 ppm .00562	Mn2576 ppm -.00003	Mo2020 ppm .00013	Na5895 ppm .29407	Ni2316 ppm .00032	P_1782 ppm -.00132	Pb2203 ppm -.00164
#1	-.00005	.02183	.17778	.00105	.00982	.00005	.00012	.37554	.00019	-.00307	.00011
#2	-.00061	-.00229	.15729	.00157	.00142	-.00010	.00014	.21261	.00045	.00043	-.00339
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .00129	Sb2068 ppm .00154	Se1960 ppm .00275	Si2881 ppm .01569	SiO2 ppm .03357	Sn1899 ppm -.00001	Sr4077 ppm .00037	Th2837 ppm -.00061	Ti3349 ppm .00031	Tl1908 ppm -.00036	U_3701 ppm -.03628
#1	.00236	-.00054	.00278	.00060	.00128	-.00049	.00054	-.00089	.00023	.00000	-.03841
#2	.00022	.00361	.00272	.03077	.06586	.00048	.00019	-.00034	.00039	-.00073	-.03415
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm -.00041	Zn2062 ppm -.00071	Zr3391 ppm .00214								
#1	.00011	-.00077	.00185								
#2	-.00092	-.00066	.00242								
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3277.3	Y_3600 Cts/S 57077.	Y_3774 Cts/S 5859.5								
#1	3282.8	56992.	5839.2								
#2	3271.9	57161.	5879.7								

Sample Name: CCVL3296658 Acquired: 5/28/2015 17:47:34 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00018	F .00089	F -.00312	F .00447	F .00196	F .00024	F -.00205	F .04355	F .00018	F -.00009	F .00002
Stddev	.00027	.00278	.00052	.00048	.00322	.00041	.00026	.06268	.00005	.00035	.00019
%RSD	152.11	311.16	16.676	10.731	164.24	167.82	12.598	143.92	25.102	402.23	975.83
#1	.00037	-.00107	-.00349	.00413	.00424	.00054	-.00186	.08787	.00021	-.00033	.00016
#2	-.00001	.00286	-.00275	.00481	-.00032	-.00005	-.00223	-.00077	.00015	.00016	-.00012
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.00500	.01000	.01000	.01000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F .00008	F .01939	F .77345	F .00269	F .00073	F .00003	F -.00016	F .40857	F .00025	F -.00378	F -.00036
Stddev	.00044	.03116	.98548	.00261	.00201	.00001	.00013	.32765	.00020	.00136	.00082
%RSD	546.65	160.68	127.41	97.328	275.40	18.134	80.099	80.194	79.140	35.897	230.09
#1	-.00023	.04143	1.4703	.00454	-.00069	.00003	-.00025	.64026	.00011	-.00474	-.00093
#2	.00040	-.00264	.07661	.00084	.00216	.00003	-.00007	.17689	.00040	-.00282	.00022
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01500	.10000	3.0000	.01000	.20000	.01000	.02000	.10000	.04000	3.0000	.00900
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.00786	F .00152	F .00064	F .11684	F .25004	F .00102	F .00223	F .00039	F .00011	F .00209	F -.04122
Stddev	.00857	.00018	.00197	.00197	.13241	.28337	.00035	.00312	.00094	.00020	.00041
%RSD	108.95	11.926	307.27	113.33	113.33	34.618	140.22	239.50	178.30	19.452	50.309
#1	.00181	.00165	.00204	.21047	.45041	.00077	.00443	-.00027	-.00003	.00180	-.05589
#2	.01392	.00139	-.00075	.02321	.04967	.00127	.00002	.00106	.00026	.00237	-.02656
Check ?	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.01500	.50000	1.0700	.10000	.01000	.01500	.01000	.01500	.01500	.06000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00070	F -.00011	F .00367								
Stddev	.00030	.00009	.00303								
%RSD	43.441	79.666	82.427								
#1	-.00048	-.00017	.00581								
#2	-.00091	-.00005	.00153								
Check ?	Chk Fail	Chk Fail	Chk Fail								
Value	.01000	.02000	.01500								
Range	-30.000%	-30.000%	-30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3327.2	57727.	5655.8								
Stddev	12.0	22.	46.7								
%RSD	.36105	.03824	.82648								
#1	3318.7	57711.	5688.9								
#2	3335.7	57742.	5622.8								

Sample Name: MB 280-279222/1-A Acquired: 5/28/2015 17:49:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/28 Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	-.00088	-.00540	.00354	.00015	.00014	-.00185	.08280	.00033
Stddev	.00018	.00062	.00101	.00023	.00021	.00004	.00032	.00163	.00003
%RSD	96.455	71.091	18.632	6.4134	137.41	26.165	17.327	1.9714	10.448
#1	.00006	-.00132	-.00469	.00338	.00000	.00017	-.00162	.08164	.00035
#2	.00032	-.00044	-.00611	.00370	.00030	.00012	-.00207	.08395	.00030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.00002	-.00019	.01314	.15769	.00108	.00399	-.00001	-.00010
Stddev	.00003	.00003	.00015	.00111	.04898	.00024	.00476	.00002	.00031
%RSD	108.33	140.29	81.903	8.4846	31.060	21.838	119.05	239.80	306.06
#1	-.00001	.00004	-.00030	.01235	.19232	.00125	.00063	-.00003	-.00033
#2	-.00005	.00000	-.00008	.01393	.12305	.00092	.00736	.00001	.00012
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21062	.00002	-.00007	.00121	.00217	.00040	.00181	.03877	.08296
Stddev	.01754	.00018	.00271	.00059	.00322	.00365	.00468	.00129	.00275
%RSD	8.3261	947.12	3883.9	49.040	148.49	921.81	258.68	3.3188	3.3188
#1	.22302	-.00011	.00184	.00079	.00445	.00298	-.00150	.03968	.08491
#2	.19822	.00015	-.00198	.00163	-.00011	-.00219	.00512	.03786	.08101
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.00022	.00024	.00010	.00115	-.02584	.00012	-.00012	.00126
Stddev	.00012	.00005	.00045	.00009	.00213	.01555	.00011	.00001	.00116
%RSD	42.722	20.882	188.68	90.946	184.72	60.160	91.417	10.079	91.779
#1	-.00036	.00025	-.00008	.00004	-.00035	-.03683	.00020	-.00011	.00044
#2	-.00020	.00019	.00055	.00017	.00266	-.01485	.00004	-.00013	.00208
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3278.1	56774.	5764.7						
Stddev	3.2	203.	8.4						
%RSD	.09652	.35805	.14549						
#1	3280.3	56918.	5770.6						
#2	3275.9	56630.	5758.8						

Sample Name: LCS 280-279222/2-A Acquired: 5/28/2015 17:52:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00150	F -.00212	F -.00085	F .00471	1.9545	.04769	.00237	46.196	F .00020
Stddev	.00858	.00035	.00390	.00010	.0196	.00081	.00178	.540	.00030
%RSD	570.33	16.376	461.45	2.1902	1.0018	1.7042	75.129	1.1696	148.15
#1	.00757	-.00188	.00191	.00464	1.9406	.04711	.00363	45.814	.00041
#2	-.00456	-.00237	-.00361	.00478	1.9683	.04826	.00111	46.578	-.00001
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail
High Limit	.05750	2.2299	1.1050	1.1050					.11100
Low Limit	.04275	1.7300	.87500	.86000					.08800
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00081	F .00003	F .03321	.94078	50.261	1.0016	F 5.9071	F .06247	F .00009
Stddev	.00007	.00021	.04218	.00966	.519	.0101	8.2977	.08785	.00029
%RSD	8.2875	763.45	126.99	1.0271	1.0326	1.0043	140.47	140.63	335.72
#1	-.00076	-.00012	.06304	.93394	49.894	.99449	11.774	.12459	.00029
#2	-.00086	.00018	.00339	.94761	50.628	1.0087	.03972	.00035	-.00012
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit	.55500	.05750	.28000				.56.500	.55000	.1.1000
Low Limit	.44500	.04275	.21500				46.000	.45000	.90000
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.406	F .00066	F -.00266	F -.00373	.00429	F .00168	F .00254	9.4668	20.259
Stddev	.534	.00001	.00028	.00119	.00555	.00146	.00322	.1545	.331
%RSD	.99900	1.6367	10.555	31.948	129.51	86.963	127.05	1.6317	1.6317
#1	53.029	.00065	-.00286	-.00457	.00821	.00065	.00481	9.3576	20.025
#2	53.784	.00067	-.00247	-.00289	.00036	.00271	.00026	9.5761	20.493
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Pass	None
High Limit	.55500	.55.500	.11.100	.55000		.55499	.2.2400		
Low Limit	.44500	.44500	9.1000	.44500		.44000	1.7000		
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00065	.97376	F .11497	F .12220	F .00072	F .26182	F .06314	F .05988	.49374
Stddev	.00056	.00961	.17594	.17182	.00078	.40339	.08924	.08300	.01225
%RSD	87.558	.98692	153.04	140.61	107.66	154.07	141.35	138.59	2.4810
#1	.00104	.96697	.23937	.24369	.00017	.54707	.12624	.11857	.48508
#2	.00025	.98056	-.00944	.00070	.00127	-.02342	.00003	.00120	.50240
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass				
High Limit	2.2600		1.2000	1.1100	2.2000	2.3000	.55500	.55500	
Low Limit	1.7000		.80000	.90000	1.7600	1.7000	.45000	.42500	
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3310.3	57182.	5592.9						
Stddev	13.9	527.	74.1						
%RSD	.42086	.92215	1.3243						
#1	3320.2	56810.	5645.2						
#2	3300.5	57555.	5540.5						

Sample Name: LCSD 280-279222/3-A Acquired: 5/28/2015 17:54:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04538	1.9750	1.0061	1.0535	1.9347	.04692	2.0597	45.596	.10425
#2	.04506	1.9797	1.0043	1.0497	1.9754	.04784	2.0525	46.554	.10353
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49343	.19255	.25175	.92036	49.630	.98765	48.468	.50697	1.0473
#2	.49357	.19231	.25087	.94487	50.665	1.0097	48.533	.50913	1.0449
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	53.393	.49397	10.701	.50069	2.1074	.52971	2.0823	9.3785	20.070
#2	54.522	.49111	10.651	.49477	2.0952	.53035	2.0650	9.6405	20.631
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0367	.96444	1.0220	1.0118	2.0300	2.1328	.52059	.49366	.44071
#2	2.0242	.98516	1.0216	1.0124	2.0064	2.1588	.52245	.50109	.45687
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3137.6	54885.	5743.7						
#2	3131.8	53914.	5662.0						

Sample Name: 280-69623-A-5-E Acquired: 5/28/2015 17:57:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00078	4.3490	.00224	.05195	.17327	.00065	-.00376	107.51	.00288
#2	-.00068	4.3612	.00054	.05276	.16996	.00047	-.00484	105.35	.00293
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00526	.00609	.07033	5.4107	3.6461	.00746	24.528	3.8120	-.00068
#2	.00551	.00569	.06998	5.3279	3.6583	.00827	24.522	3.8181	-.00034
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	91.852	.05124	.36594	.01767	37.946	.00119	.01008	17.290	37.001
#2	92.239	.05085	.36696	.01601	37.903	.00343	.01204	17.288	36.997
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00442	.74329	.00150	.13166	-.01065	-.00216	.00779	.48110	.00587
#2	.00351	.72723	.00226	.12833	-.01170	-.03207	.00836	.48217	.00599
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3108.8	53174.	5562.0						
#2	3073.2	52849.	5626.0						

Sample Name: 280-69623-A-28-C Acquired: 5/28/2015 17:59:32 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 309.271 {109}	B_2089 ppm	Ba4554 .42873	Be3130 .00244	Bi2230 -.00472	Ca3179 114.04	Cd2288 .36442
#1	.00010	38.921	.05371	.05536	.42378	.00248	-.00427	112.68	.36501
#2	-.00055	40.105	.05298	.05415	.43369	.00239	-.00516	115.40	.36382
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 205.560 {464}	Fe2714 324.754 {104}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.04510	.06980	.10757	101.71	9.7179	.06168	28.191	9.3465	-.00147
#2	.04462	.06963	.10911	104.53	9.9030	.06235	28.318	9.3959	-.00090
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 231.604 {446}	Pb2203 178.284 {489}	S_1820 220.353 {453}	Sb2068 182.034 {485}	Se1960 206.833 {463}	Si2881 196.090 {472}	SiO2 288.158 {117}288.158 {117}2
#1	25.734	.10529	1.9608	.04726	10.089	-.00797	.00470	56.558	121.03
#2	26.170	.10524	1.9465	.05006	10.039	-.00311	.01355	57.844	123.79
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 407.771 {83}	Ti3349 283.730 {119}	Tl1908 334.904 {101}	U_3701 190.856 {477}	V_2924 370.152 {91}	Zn2062 292.402 {115}	Zr3391 206.200 {163}
#1	.00790	.88053	.03358	.74537	-.01223	-.11228	.06847	2.1722	.01759
#2	.00703	.90346	.02857	.70313	-.01298	-.06518	.06965	2.1970	.01742
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 360.073 {94}	377.433 {89}					
#1	3247.3	55256.		5786.5					
#2	3273.9	54814.		5696.2					

Sample Name: 280-69667-A-1-C Acquired: 5/28/2015 18:02:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.42480	-.00134	.04390	.03960	.00005	-.00607	25.995	.00043
Stddev	.00035	.00296	.00652	.00022	.00019	.00006	.00329	.183	.00013
%RSD	82.291	.69606	486.87	.49338	.48582	117.27	54.289	.70391	31.276
#1	.00018	.42271	.00327	.04374	.03973	.00009	-.00374	26.124	.00052
#2	.00067	.42689	-.00595	.04405	.03946	.00001	-.00840	25.865	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00037	.00321	.00073	.17944	3.2638	.00671	4.1490	.02456	.00006
Stddev	.00006	.00024	.00009	.00322	.0347	.00020	.0261	.00007	.00021
%RSD	16.368	7.3504	12.379	1.7923	1.0635	3.0086	.62984	.28132	389.84
#1	-.00041	.00304	.00080	.18172	3.2393	.00685	4.1675	.02460	.00021
#2	-.00033	.00338	.00067	.17717	3.2884	.00657	4.1305	.02451	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.093	.00450	.06776	-.00013	5.5084	.00222	.00356	17.486	37.420
Stddev	.082	.00045	.00126	.00173	.0646	.00332	.00293	.009	.020
%RSD	.47719	9.9809	1.8542	1352.4	1.1737	149.56	82.257	.05330	.05330
#1	17.151	.00418	.06865	-.00135	5.4627	.00457	.00149	17.493	37.434
#2	17.036	.00482	.06687	.00110	5.5541	-.00013	.00563	17.479	37.406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.20361	-.00128	.01067	-.00236	.01708	.00581	.00220	.00204
Stddev	.00090	.00139	.00099	.00135	.00120	.01446	.00015	.00005	.00098
%RSD	182.44	.68136	76.988	12.647	50.878	84.662	2.5273	2.3460	48.135
#1	-.00014	.20459	-.00198	.01163	-.00151	.02730	.00591	.00217	.00135
#2	.00114	.20262	-.00058	.00972	-.00321	.00685	.00571	.00224	.00274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3262.1	55819.	5659.5						
Stddev	4.3	36.	52.3						
%RSD	.13120	.06375	.92485						
#1	3259.1	55844.	5622.4						
#2	3265.2	55794.	5696.5						

Sample Name: 280-69667-A-1-C SD@5 Acquired: 5/28/2015 18:04:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00008	.09483	-.00275	.01039	.00787	.00016	-.00211	5.2618	.00035
#2	.00021	.09350	-.00333	.01124	.00823	.00006	-.00343	5.2982	.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00008	.00075	.00033	.14696	.65458	.00406	.85000	.00698	-.00046
#2	-.00010	.00069	-.00035	.14987	.67333	.00367	.81977	.00677	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	3.4050	.00157	.01588	-.00002	1.0930	-.00012	.00343	3.4653	7.4157
#2	3.4208	.00146	.01178	.00073	1.0933	.00166	.00563	3.4850	7.4580
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00031	.04120	.00040	.00201	.00122	-.01545	.00099	.00109	.00025
#2	.00201	.04149	-.00057	.00186	.00228	.01280	.00136	.00149	.00294
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3330.5	57641.	5843.2						
#2	3348.1	57424.	5721.7						

Sample Name: 280-69667-A-1-D MS Acquired: 5/28/2015 18:07:13 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04405	W 2.8983	.98605	1.0710	1.9177	.04513	F 2.0166	69.713	.10221
Stddev	.00061	.0498	.00183	.0002	.0423	.00102	.0075	1.533	.00009
%RSD	1.3782	1.7201	.18587	.01675	2.2058	2.2567	.37312	2.1995	.09263
#1	.04448	2.8631	.98735	1.0711	1.8878	.04441	2.0219	68.628	.10228
#2	.04362	2.9336	.98476	1.0708	1.9476	.04585	2.0113	70.797	.10215
Check ?	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47546	W .19175	.24476	1.1230	51.475	.96744	50.810	.51675	1.0103
Stddev	.00058	.00033	.00028	.0285	1.105	.02114	.355	.00173	.0013
%RSD	.12126	.17221	.11296	2.5374	2.1473	2.1854	.69904	.33513	.12329
#1	.47587	.19199	.24456	1.1029	50.693	.95249	51.061	.51797	1.0111
#2	.47505	.19152	.24495	1.1432	52.256	.98239	50.559	.51552	1.0094
Check ?	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	69.365	.47739	W 10.521	.47817	7.6586	.51660	2.0129	27.659	59.189
Stddev	1.037	.00041	.017	.00787	.0296	.00130	.0088	.596	1.276
%RSD	1.4953	.08560	.16443	1.6468	.38712	.25117	.43876	2.1555	2.1555
#1	68.631	.47710	10.534	.48374	7.6795	.51568	2.0066	27.237	58.287
#2	70.098	.47768	10.509	.47260	7.6376	.51751	2.0191	28.080	60.091
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9569	1.1430	.99985	.99937	1.9158	2.0862	.51600	.47832	.43677
Stddev	.0042	.0237	.00312	.00477	.0024	.0067	.00255	.00265	.01316
%RSD	.21601	2.0736	.31213	.47727	.12569	.32042	.49432	.55330	3.0120
#1	1.9599	1.1262	1.0021	1.0027	1.9175	2.0814	.51781	.48019	.42747
#2	1.9539	1.1597	.99765	.99599	1.9141	2.0909	.51420	.47645	.44608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3169.5	55150.	5871.3						
Stddev	10.0	291.	110.4						
%RSD	.31486	.52819	1.8811						
#1	3176.6	54944.	5949.4						
#2	3162.5	55356.	5793.2						

Sample Name: 280-69667-A-1-E MSD Acquired: 5/28/2015 18:09:32 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.04413	2.5916	2.8287	.97594	1.0624	1.8540	.04362	2.0017	66.229
#2	.04439	2.5991	2.9050	.96834	1.0580	1.9102	.04550	1.9854	68.091
Check ? High Limit Low Limit	Chk Pass	Chk Warn 2.5000 -.05000	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}
#1	.10074	.46662	.19053	.24102	1.0892	49.597	.93540	49.691	.50985
#2	.10088	.46741	.18870	.24136	1.1345	50.989	.96548	49.703	.50859
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	.99726	66.596	.46849	10.368	.46737	7.3565	.51041	1.9920	26.046
#2	.99465	68.374	.46868	10.336	.46880	7.3164	.50806	1.9864	26.821
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	55.739	1.9283	1.0972	.98630	.98493	1.8899	2.0122	.50890	.47142
#2	57.397	1.9225	1.1315	.98278	.98572	1.8750	2.0452	.50972	.47135
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	.41968								
#2	.43531								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69667-A-1-E MSD Acquired: 5/28/2015 18:09:32 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279222 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3185.2	55067.	5941.9
Stddev	22.0	5.	82.3
%RSD	.69022	.00907	1.3849
#1	3200.8	55071.	6000.1
#2	3169.7	55064.	5883.7

Sample Name: CCVH-3283796 Acquired: 5/28/2015 18:11:51 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00579	Al3092 ppm 48.015	As1890 ppm -.00403	B_2089 ppm .00333	Ba4554 ppm .00082	Be3130 ppm .00024	Bi2230 ppm 1.0424	Ca3179 ppm .07668	Cd2288 ppm -.00002	Co2286 ppm -.00088	Cr2055 ppm .00034
#1	-.00604	48.041	-.00526	.00410	.00093	.00028	1.0490	.09454	-.00010	-.00052	.00058
#2	-.00555	47.989	-.00279	.00255	.00071	.00020	1.0358	.05881	.00006	-.00125	.00011
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00044	Fe2714 ppm 47.360	K_7664 ppm .17706	Li6707 ppm .00254	Mg2790 ppm .06788	Mn2576 ppm -.00127	Mo2020 ppm -.00028	Na8183 ppm 250.35	Ni2316 ppm .00255	P_1782 ppm .00202	Pb2203 ppm -.00070
#1	.00029	47.443	.17535	.00209	.07087	-.00117	-.00028	251.34	.00256	.00174	-.00023
#2	.00059	47.277	.17877	.00299	.06488	-.00137	-.00028	249.36	.00255	.00231	-.00117
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0789	Sb2068 ppm -.01195	Se1960 ppm .01127	Si2881 ppm .03048	SiO2 ppm .06523	Sn1899 ppm -.00033	Sr4077 ppm .00095	Th2837 ppm 5.0732	Ti3349 ppm -.01214	TI1908 ppm .00019	U_3701 ppm W 10.612
#1	5.0991	-.01472	0.1136	.03608	.07722	-.00086	.00106	5.0797	-.01195	-.00062	10.592
#2	5.0587	-.00918	.01118	.02488	.05325	.00020	.00085	5.0666	-.01233	.00099	10.631
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00268	Zn2062 ppm -.00054	Zr3391 ppm -.14197								
#1	.00230	-.00033	-.14257								
#2	.00305	-.00075	-.14137								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3222.9	Y_3600 Cts/S 54429.	Y_3774 Cts/S 5677.4								
#1	3215.7	54258.	5657.7								
#2	3230.1	54600.	5697.1								

Sample Name: CCV-3290307 Acquired: 5/28/2015 18:14:21 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48441	.51662	1.0045	.52327	.47868	.46164	-.00309	4.6407	.51473	.49983	.50014	.48905	2.3036
Stddev	.00125	.00289	.0032	.00461	.00280	.00266	.00470	.0401	.00243	.00238	.00022	.00193	.0273
%RSD	.25811	.55870	.31859	.88148	.58541	.57592	151.85	.86382	.47288	.47712	.04430	.39482	1.1837
#1	.48353	.51458	1.0022	.52001	.47670	.45976	-.00641	4.6124	.51301	.49815	.49998	.48768	2.2843
#2	.48530	.51866	1.0067	.52653	.48067	.46352	.00023	4.6691	.51646	.50152	.50029	.49041	2.3229
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.054	.97596	19.268	.50808	.49380	5.1357	.50026	1.0360	1.0001	.00608	1.0213	1.0187	4.6826
Stddev	.264	.00864	.021	.00097	.00207	.0132	.00296	.0074	.0028	.00593	.0059	.0093	.0553
%RSD	.53738	.88549	.10713	.19016	.41983	.25647	.59097	.71642	.28370	97.419	.57759	.91704	1.1798
#1	48.867	.96985	19.253	.50740	.49234	5.1264	.49817	1.0308	.99813	.00189	1.0171	1.0121	4.6435
#2	49.240	.98207	19.282	.50877	.49527	5.1450	.50235	1.0413	1.0021	.01027	1.0255	1.0253	4.7216
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.021	.99900	.47907	-.00342	.49767	1.0226	-.00623	.51587	.50326	.46632			
Stddev	.118	.00267	.00199	.00103	.00070	.0010	.00274	.00522	.00031	.00247			
%RSD	1.1798	.26727	.41435	30.156	.14091	.09473	44.008	1.0127	.06118	.53071			
#1	9.9371	.99711	.47766	-.00414	.49717	1.0219	-.00817	.51957	.50304	.46457			
#2	10.104	1.0009	.48047	-.00269	.49816	1.0233	-.00429	.51218	.50348	.46807			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3279.8	56015.	5693.8										
Stddev	9.5	178.	15.7										
%RSD	.29079	.31714	.27581										
#1	3286.6	56140.	5704.9										
#2	3273.1	55889.	5682.7										

Sample Name: CCB Acquired: 5/28/2015 18:16:45 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00077	Al1670 ppm -.00071	As1890 ppm .00438	B_2089 ppm .00236	Ba4554 ppm -.00013	Be3130 ppm .00005	Bi2230 ppm -.00449	Ca3179 ppm .00249	Cd2288 ppm -.00002	Co2286 ppm -.00023	Cr2055 ppm -.00005	Cu3247 ppm -.00022	Fe2599 ppm .00012
#1	.00103	-.00038	.00157	.00326	-.00034	.00002	-.00382	.00095	.00004	-.00030	-.00018	.00000	-.00048
#2	.00051	-.00105	.00719	.00147	.00008	.00008	-.00516	.00403	-.00007	-.00017	.00007	-.00045	.00071
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .11809	Li6707 ppm .00193	Mg2790 ppm .01725	Mn2576 ppm .00075	Mo2020 ppm .00043	Na5895 ppm .14097	Ni2316 ppm .00017	P_1782 ppm -.00310	Pb2203 ppm .00019	S_1820 ppm .00291	Sb2068 ppm .00199	Se1960 ppm .00169	Si2881 ppm .02969
#1	.07992	.00205	.02438	.00104	.00044	.13946	.00022	-.00150	-.00104	.00791	.00091	.00166	.02857
#2	.15626	.00180	.01012	.00045	.00042	.14247	.00012	-.00470	.00142	-.00210	.00307	.00172	.03081
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .06354	Sn1899 ppm -.00007	Sr4077 ppm .00009	Th2837 ppm .00217	Ti3349 ppm .00038	TI1908 ppm .00093	U_3701 ppm -.01470	V_2924 ppm -.00028	Zn2062 ppm .00012	Zr3391 ppm .00188			
#1	.06114	-.00038	.00014	.00259	.00068	.00080	-.01111	.00011	.00083	.00192			
#2	.06594	.00024	.00003	.00174	.00009	.00106	-.01830	-.00067	-.00059	.00183			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3227.0	Y_3600 Cts/S 57497.	Y_3774 Cts/S 5761.3										
#1	3233.2	58043.	5822.7										
#2	3220.9	56951.	5700.0										

Sample Name: CCVL3296658 Acquired: 5/28/2015 18:19:02 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00059	F -.00089	F -.00379	F .00210	F .00183	F .00024	F -.00126	F .04333	F .00001	F -.00017	F -.00006
Stddev	.00060	.00029	.00209	.00006	.00268	.00020	.00082	.05310	.00021	.00000	.00001
%RSD	100.51	33.062	55.096	2.9368	146.64	82.074	64.734	122.55	1415.8	.73419	14.826
#1	.00017	-.00110	-.00231	.00215	.00372	.00039	-.00184	.08088	-.00013	-.00017	-.00006
#2	.00102	-.00068	-.00527	.00206	-.00007	.00010	-.00069	.00578	.00016	-.00017	-.00007
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00057	F .02091	F .74887	F .00502	F .00223	F .00002	F -.00010	F .34010	F .00053	F -.00411	F -.00163
Stddev	.00026	.03294	.97340	.00326	.00095	.00008	.00014	.30674	.00005	.00297	.00004
%RSD	46.274	157.57	129.98	64.950	42.777	516.80	146.52	90.192	10.351	72.213	2.6590
#1	-.00038	.04420	1.4372	.00732	.00290	-.00004	-.00020	.55700	.00056	-.00201	-.00166
#2	-.00075	-.00239	.06058	.00271	.00155	.00007	.00000	.12320	.00049	-.00621	-.00160
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	.00099	F .00142	F .00073	F .11558	F .24733	F .00072	F .00215	F .00047	F .00006	F .00075	F -.02556
Stddev	.00145	.00085	.00106	.15329	.32805	.00105	.00309	.00184	.00009	.00040	.03056
%RSD	146.65	60.127	145.55	132.63	132.63	145.24	143.40	388.27	137.62	53.007	119.57
#1	-.00004	.00082	.00147	.22397	.47930	-.00002	.00434	-.00083	.00000	.00047	-.00395
#2	.00201	.00202	-.00002	.00718	.01537	.00147	-.00003	.00178	.00012	.00104	-.04716
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F -.00026	F -.00013	F .00551								
Stddev	.00023	.00045	.00406								
%RSD	91.390	353.14	73.618								
#1	-.00042	.00019	.00838								
#2	-.00009	-.00044	.00264								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243	Y_3600	Y_3774								
Avg	3291.2	56841.	5676.4								
Stddev	4.5	184.	115.7								
%RSD	.13737	.32289	2.0375								
#1	3288.0	56971.	5594.7								
#2	3294.4	56712.	5758.2								

Sample Name: 280-69667-A-2-E Acquired: 5/28/2015 18:21:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00131	-.00180	-.00957	.00168	.03559	.00013	-.00025	25.671	.00031
#2	-.00070	-.00154	.00070	.00168	.03512	.00013	-.00187	25.449	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00023	-.00032	.00035	.66728	3.4072	.00789	.25730	.00465	-.00023
#2	-.00026	-.00028	-.00068	.66793	3.4206	.00709	.01085	-.00005	-.00046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	13.292	.00070	.00306	-.00896	.01035	.00088	.00313	19.799	42.370
#2	13.599	.00004	-.00518	-.00920	-.00314	.00032	.00382	19.892	42.569
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.00600	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00014	.20709	.00003	.00016	.00029	-.01945	.00073	.00200	.00143
#2	.00077	.20490	-.00226	-.00015	.00149	-.02891	-.00054	-.00079	-.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3274.6	57143.	5739.9						
#2	3277.6	56875.	5774.0						

Sample Name: 280-69667-A-3-C Acquired: 5/28/2015 18:23:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.07261	-.00118	.02472	.03948	.00018	-.00393	27.470	.00043
Stddev	.00039	.00103	.00018	.00003	.00038	.00000	.00454	.033	.00027
%RSD	445.44	1.4207	14.921	.11949	.95880	.99388	115.37	.12116	63.361
#1	-.00019	.07334	-.00130	.02474	.03921	.00019	-.00714	27.447	.00024
#2	.00036	.07188	-.00106	.02470	.03974	.00018	-.00072	27.494	.00062
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00053	.00134	.00027	.05863	2.8256	.00700	3.8457	.00310	-.00058
Stddev	.00009	.00001	.00061	.00188	.0681	.00178	.0222	.00001	.00011
%RSD	17.291	.98152	229.22	3.2063	2.4096	25.490	.57800	.20042	19.289
#1	-.00059	.00134	-.00016	.05730	2.7774	.00574	3.8300	.00310	-.00066
#2	-.00046	.00133	.00069	.05996	2.8737	.00826	3.8615	.00310	-.00050
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.5529	.00316	.04887	-.00079	4.2806	-.00175	.00075	15.936	34.102
Stddev	.0067	.00001	.00326	.00017	.0173	.00150	.00695	.263	.562
%RSD	.07869	.28366	6.6768	21.340	.40384	85.758	924.15	1.6474	1.6474
#1	8.5481	.00315	.05118	-.00091	4.2684	-.00281	-.00416	15.750	33.705
#2	8.5576	.00317	.04657	-.00067	4.2929	-.00069	.00566	16.121	34.500
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	.19289	.00141	.00110	-.00275	-.03803	.00362	.00177	.00108
Stddev	.00001	.00059	.00066	.00029	.00217	.02059	.00008	.00052	.00001
%RSD	.85641	.30724	46.787	26.800	79.162	54.157	2.2569	29.338	.76117
#1	.00066	.19247	.00188	.00130	-.00121	-.05259	.00368	.00214	.00108
#2	.00065	.19330	.00095	.00089	-.00428	-.02346	.00356	.00140	.00107
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3251.4	56815.	5740.9						
Stddev	19.8	18.	5.0						
%RSD	.60997	.03229	.08777						
#1	3265.4	56828.	5737.3						
#2	3237.3	56802.	5744.5						

Sample Name: 280-69667-A-4-C Acquired: 5/28/2015 18:26:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00188	.00316	.00118	.01777	.05698	.00005	-.00136	25.701	.00038
#2	.00283	.00211	-.00388	.01629	.05741	-.00003	-.00345	25.982	.00009
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	10.506	11.083	.00339	.01899	-.00097	2.5661	.00356	.00695	20.479
#2	10.645	11.122	.00284	.02075	-.00476	2.5622	-.00109	.00557	20.895
Check ? High Limit Low Limit	Chk Warn 10.500 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	43.824	-.00173	.15923	-.00210	.00023	-.00101	-.03439	.00918	.00184
#2	44.716	.00118	.16077	-.00047	.00012	-.00214	-.03578	.00859	.00156
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	.00261								
#2	-.00011								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69667-A-4-C Acquired: 5/28/2015 18:26:27 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279222 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3236.4	55651.	5641.1
Stddev	.4	25.	19.4
%RSD	.01238	.04507	.34420
#1	3236.7	55669.	5654.8
#2	3236.1	55633.	5627.4

Sample Name: 280-69667-A-5-C Acquired: 5/28/2015 18:29:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00850	.03201	-.00489	.03049	.02710	-.00003	-.00279	25.396	.00025
#2	.00850	.03189	-.00077	.02924	.02786	.00009	-.00343	26.008	.00051
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00211	.00900	.00243	.07779	3.5141	.00717	3.2519	.00589	.00139
#2	.00241	.00839	.00243	.08297	3.5729	.00590	3.2567	.00579	.00072
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	15.130	.01010	.02624	-.00390	4.0626	.00487	.00693	19.714	42.189
#2	15.640	.00972	.03087	-.00285	3.9982	.00372	-.00283	20.114	43.044
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00112	.21068	.00039	.00065	-.00712	-.02795	.01335	.00443	.00086
#2	-.00022	.21555	-.00006	.00022	.00203	.00291	.01337	.00616	.00094
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3233.3	55302.	5583.3						
#2	3255.8	55387.	5475.6						

Sample Name: 280-69779-C-1-B Acquired: 5/28/2015 18:31:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 28.087	B_2089 .00367	Ba4554 .13197	Be3130 1.5137	Bi2230 .00286	Ca3179 -.00458	Cd2288 107.24
#1	-.00045	27.957	.00005	.13134	1.5139	.00276	-.00257	107.25	.00096
#2	.00002	28.218	.00728	.13259	1.5136	.00295	-.00659	107.22	.00085
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 205.560 {464}	Fe2599 324.754 {104}	K_7664 259.940 {130}	Li6707 766.490 {44}	Mg2790 670.784 {50}	Mn2576 279.079 {121}	Mo2020 257.610 {131}
#1	.01609	.02576	.06099	23.438	34.773	.08429	13.149	.91937	.02992
#2	.01557	.02604	.06094	23.434	34.708	.08539	13.235	.92189	.03142
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 .02616	Pb2203 .94283	S_1820 .02487	Sb2068 137.96	Se1960 -.00362	Si2881 .01166	SiO2 W 53.114
#1	287.10	.02634	.94295	.02518	137.79	-.00232	.01093	53.156	113.75
#2	287.55	.02599	.94271	.02456	138.12	-.00491	.01240	53.072	113.57
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 1.2275	Ti3349 .03107	Tl1908 .24373	U_3701 -.00812	V_2924 .00736	Zn2062 .04564	Zr3391 .17096
#1	.00610	1.2268	.03082	.24254	-.00774	.01124	.04492	.16885	.00860
#2	.00676	1.2282	.03132	.24493	-.00851	.00348	.04636	.17308	.00736
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	360.073 {94}	377.433 {89}				
#1	3260.1	54564.	5876.1						
#2	3248.7	53955.	5872.1						

Sample Name: 280-69779-C-2-B Acquired: 5/28/2015 18:34:12 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00282	As1890 ppm .07195	B_2089 ppm .28890	Ba4554 ppm 4.7078	Be3130 ppm .02597	Bi2230 ppm -.00162	Ca3179 ppm W 606.05	Cd2288 ppm .00503
#1	-.00280	408.57	.07197	.28879	4.7060	.02608	-.00461	607.09	.00484
#2	-.00284	408.28	.07192	.28901	4.7096	.02586	.00137	605.01	.00522
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .16118	Cu3247 ppm W .26234	Fe2714 ppm .69103	K_7664 ppm 366.40	Li6707 ppm 49.076	Mg2790 ppm .33359	Mn2576 ppm 115.59	Mo2020 ppm 8.0138
#1	.16021	.26042	.69264	366.50	49.052	.33275	115.37	8.0159	.00180
#2	.16214	.26427	.68941	366.30	49.101	.33443	115.80	8.0116	.00089
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 239.36	P_1782 ppm .20710	Pb2203 ppm W 22.429	S_1820 ppm .22664	Sb2068 ppm 125.30	Se1960 ppm F -.02700	Si2881 ppm .01850	SiO2 ppm W 91.377
#1	239.58	.20496	22.500	.22601	125.38	-.02826	.01258	91.000	194.74
#2	239.14	.20924	22.358	.22727	125.21	-.02574	.02443	91.753	196.35
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Fail 50.000 -.02000	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .01710	Th2837 ppm 4.1232	Ti3349 ppm .21853	Tl1908 ppm 1.2191	U_3701 ppm .00104	V_2924 ppm F -.14394	Zn2062 ppm .62235	Zr3391 ppm 1.3431
#1	.01625	4.1155	.21829	1.2170	.00311	-.14397	.62247	1.3453	.09911
#2	.01795	4.1310	.21878	1.2212	-.00104	-.14392	.62223	1.3410	.10232
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 4730.2	Y_3774 Cts/S 78057.	377.433 {89}	9126.2	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
#1	4719.7	78154.	9110.7						
#2	4740.6	77960.	9141.6						

Sample Name: 280-69779-C-3-B Acquired: 5/28/2015 18:37:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 224.04	B_2089 .05427	Ba4554 .29464	Be3130 455.403 {74}	Bi2230 .03825	Ca3179 223.061 {108}	Cd2288 .00310	ppm	ppm
#1	-.00152	223.75	.05966	.29456	6.0070	.03812	.00291	240.03	.00233		
#2	-.00139	224.33	.04889	.29472	6.0409	.03839	.00330	241.61	.00258		
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 205.560 {464}	Fe2714 324.754 {104}	K_7664 271.441 {124}	Li6707 766.490 {44}	Mg2790 670.784 {50}	Mn2576 279.079 {121}2	Mo2020 257.610 {131}	ppm	ppm
#1	.03946	.07649	.10387	121.84	21.822	.20363	49.585	3.0016	.04999		
#2	.03889	.07660	.10397	122.47	21.912	.20712	49.425	3.0021	.04912		
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 231.604 {446}	Pb2203 178.284 {489}	S_1820 220.353 {453}	Sb2068 182.034 {485}	Se1960 206.833 {463}	Si2881 196.090 {472}	SiO2 288.158 {117}	288.158 {117}2	ppm
#1	402.50	.07687	3.2084	.17350	85.017	-.01028	.01981	97.720	209.12		
#2	406.16	.07587	3.1939	.17426	85.105	-.01098	.02465	98.047	209.82		
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Warn 2.0000 -.01000	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 407.771 {83}	Ti3349 283.730 {119}	Tl1908 334.904 {101}	U_3701 190.856 {477}	V_2924 370.152 {91}	Zn2062 292.402 {115}	Zr3391 206.200 {163}	ppm	ppm
#1	.02934	3.4989	.25633	.14921	-.00454	-.00100	.13895	.54510	.00866		
#2	.02911	3.5185	.25615	.15031	-.00426	-.00463	.13891	.54672	.00960		
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S								
#1	3716.4	61408.	6622.6								
#2	3733.6	61407.	6559.1								

Sample Name: CCVH-3283796 Acquired: 5/28/2015 18:39:33 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00545	Al3092 ppm 48.346	As1890 ppm -.00524	B_2089 ppm .00228	Ba4554 ppm .00074	Be3130 ppm .00013	Bi2230 ppm 1.0339	Ca3179 ppm .04500	Cd2288 ppm -.00014	Co2286 ppm -.00074	Cr2055 ppm .00039
#1	-.00504	48.580	-.00717	.00231	.00081	.00010	1.0366	.05050	-.00035	-.00051	.00019
#2	-.00586	48.112	-.00331	.00226	.00068	.00016	1.0312	.03950	.00008	-.00096	.00059
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00089	Fe2714 ppm 47.420	K_7664 ppm .14453	Li6707 ppm .00311	Mg2790 ppm .06386	Mn2576 ppm -.00107	Mo2020 ppm -.00052	Na8183 ppm 252.75	Ni2316 ppm .00320	P_1782 ppm .00663	Pb2203 ppm .00059
#1	.00048	47.447	.15205	.00245	.05537	-.00159	-.00035	253.12	.00305	.00811	.00095
#2	.00130	47.392	.13702	.00377	.07236	-.00054	-.00070	252.38	.00336	.00515	.00022
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0845	Sb2068 ppm -.01051	Se1960 ppm .00885	Si2881 ppm .23811	SiO2 ppm .50955	Sn1899 ppm -.00215	Sr4077 ppm .00048	Th2837 ppm 5.0759	Ti3349 ppm -.01298	Tl1908 ppm .00204	U_3701 ppm W 10.574
#1	5.1063	-.00855	.00767	.24177	.51738	-.00228	.00044	5.0858	-.01320	.00301	10.469
#2	5.0628	-.01247	.01002	.23445	.50171	-.00201	.00051	5.0661	-.01276	.00107	10.680
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00248	Zn2062 ppm -.00101	Zr3391 ppm -.13913								
#1	.00195	-.00119	-.13871								
#2	.00300	-.00083	-.13954								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3213.2	Y_3600 Cts/S 53855.	Y_3774 Cts/S 5485.6								
#1	3207.4	53427.	5491.7								
#2	3218.9	54282.	5479.6								

Sample Name: CCV-3290307 Acquired: 5/28/2015 18:42:04 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48593	.53621	.99221	.51281	.47339	.45478	-.00430	4.6276	.50895	.49826	.49950	.49018	2.2832
Stddev	.00193	.00848	.01010	.00323	.00510	.00444	.00068	.0184	.00048	.00236	.00224	.00001	.0131
%RSD	.39684	1.5820	1.0177	.63051	1.0778	.97680	15.810	.39716	.09490	.47374	.44765	.00125	.57284
#1	.48729	.53021	.98507	.51052	.47700	.45792	-.00479	4.6406	.50929	.49659	.49792	.49018	2.2925
#2	.48456	.54221	.99935	.51510	.46979	.45164	-.00382	4.6146	.50861	.49993	.50108	.49017	2.2740

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.731	.96831	19.471	.50823	.49151	5.0975	.49852	1.0172	1.0010	.02418	1.0055	1.0045	4.7742
Stddev	.437	.01146	.033	.00211	.00220	.0709	.00195	.0062	.0003	.00543	.0059	.0039	.0138
%RSD	.89736	1.1838	.16935	.41463	.44725	1.3916	.39030	.60762	.03019	22.462	.58591	.38486	.28791
#1	49.040	.97641	19.448	.50674	.48995	5.1477	.49714	1.0128	1.0008	.02034	1.0013	1.0017	4.7645
#2	48.421	.96020	19.494	.50972	.49306	5.0474	.49989	1.0215	1.0012	.02802	1.0096	1.0072	4.7839

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.217	.99411	.47299	-.00321	.49870	1.0135	-.01889	.51706	.51064	.46261
Stddev	.029	.00134	.00414	.00094	.00186	.0037	.00783	.00122	.00279	.00421
%RSD	.28791	.13500	.87608	29.145	.37244	.36894	41.430	.23540	.54656	.91112
#1	10.196	.99316	.47592	-.00388	.49739	1.0109	-.01336	.51620	.50867	.45963
#2	10.238	.99506	.47006	-.00255	.50001	1.0162	-.02442	.51792	.51262	.46559

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3289.3	56018.	5743.0								
Stddev	3.8	259.	85.5								
%RSD	.11504	.46236	1.4885								
#1	3286.6	56201.	5682.5								
#2	3292.0	55835.	5803.4								

Sample Name: CCB Acquired: 5/28/2015 18:44:29 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00096	Al1670 ppm .01490	As1890 ppm -.00282	B_2089 ppm .00263	Ba4554 ppm .00017	Be3130 ppm -.00004	Bi2230 ppm -.00355	Ca3179 ppm F .09496	Cd2288 ppm .00002	Co2286 ppm -.00016	Cr2055 ppm .00002	Cu3247 ppm -.00022
#1	.00096	.01696	-.00132	.00236	.00013	-.00001	-.00351	.09713	.00017	-.00019	.00030	-.00011
#2	.00096	.01284	-.00432	.00291	.00022	-.00006	-.00360	.09280	-.00014	-.00014	-.00026	-.00032
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .05000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm .01548	K_7664 ppm .11557	Li6707 ppm .00181	Mg2790 ppm .01181	Mn2576 ppm .00043	Mo2020 ppm .00002	Na5895 ppm .18714	Ni2316 ppm .00004	P_1782 ppm -.00109	Pb2203 ppm -.00069	S_1820 ppm .01686	Sb2068 ppm .00115
#1	.01756	.10219	.00329	.01205	.00044	.00031	.20408	.00022	-.00167	-.00046	.02177	.00141
#2	.01340	.12895	.00034	.01156	.00043	-.00028	.17019	-.00013	-.00051	-.00092	.01195	.00089
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm .00309	Si2881 ppm F .10787	SiO2 ppm F .23084	Sn1899 ppm .00007	Sr4077 ppm .00039	Th2837 ppm .00041	Ti3349 ppm .00021	TI1908 ppm .00147	U_3701 ppm -.02413	V_2924 ppm .00001	Zn2062 ppm .00056	Zr3391 ppm .00085
#1	.00397	.11973	.25623	-.00074	.00039	.00076	.00020	.00090	.00705	.00050	.00047	.00126
#2	.00222	.09601	.20545	.00088	.00038	.00006	.00022	.00203	-.05532	-.00047	.00065	.00043
Check ? High Limit Low Limit	Chk Pass	Chk Fail .10000 -.10000	Chk Fail .21400 -.21400	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3307.5	Y_3600 Cts/S 56659.	Y_3774 Cts/S 5600.2									
#1	3299.7	56565.	5575.8									
#2	3315.3	56752.	5624.5									

Sample Name: CCVL3296658 Acquired: 5/28/2015 18:46:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00060	F .00241	F -.00409	F .00100	F .00228	F .00028	F -.00401	F .05220	F .00042	F -.00022	F .00008
Stddev	.00028	.00173	.00198	.00013	.00319	.00035	.00073	.06721	.00007	.00020	.00016
%RSD	46.371	71.742	48.418	12.984	139.72	127.61	18.084	128.76	16.537	88.309	208.71
#1	.00080	.00363	-.00549	.00091	.00453	.00053	-.00453	.09972	.00047	-.00037	.00019
#2	.00040	.00119	-.00269	.00109	.00003	.00003	-.00350	.00467	.00037	-.00008	-.00004
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.00500	.01000	.01000	.01000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00050	F .02621	F .79278	F .00369	F .00765	F .00031	F .00002	F .35109	F .00050	F -.00209	F -.00064
Stddev	.00020	.03154	.98870	.00300	.01181	.00023	.00034	.34076	.00030	.00078	.00010
%RSD	39.572	120.34	124.71	81.156	154.33	74.394	2080.7	97.059	58.807	37.384	15.335
#1	-.00064	.04851	1.4919	.00581	.01600	.00048	.00026	.59204	.00029	-.00264	-.00071
#2	-.00036	.00391	.09367	.00157	-.00070	.00015	-.00022	.11013	.00071	-.00154	-.00057
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01500	.10000	3.0000	.01000	.20000	.01000	.02000	.10000	.04000	3.0000	.00900
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	.00632	F .00083	F .00225	F .16158	F .34579	F .00063	F .00218	F -.00013	F .00019	F .00065	F -.00692
Stddev	.00156	.00277	.00481	.16485	.35278	.00099	.00319	.00002	.00003	.00068	.05782
%RSD	24.661	333.24	213.91	102.02	102.02	156.37	145.98	15.128	14.127	105.61	835.72
#1	.00742	-.00113	.00565	.27815	.59524	-.00007	.00443	-.00011	.00021	.00016	.03397
#2	.00522	.00279	-.00115	.04502	.09634	.00134	-.00007	-.00014	.00017	.00113	-.04780
Check ?	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.01500	.50000	1.0700	.10000	.01000	.01500	.01000	.01500	.01500	.06000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F .00067	F .00008	F .00299								
Stddev	.00057	.00077	.00565								
%RSD	85.264	990.15	188.95								
#1	.00107	-.00046	.00699								
#2	.00026	.00062	-.00101								
Check ?	Chk Fail	Chk Fail	Chk Fail								
Value	.01000	.02000	.01500								
Range	-30.000%	-30.000%	-30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3412.2	58700.	5622.1								
Stddev	10.1	151.	29.8								
%RSD	.29610	.25730	.52961								
#1	3405.0	58594.	5643.2								
#2	3419.3	58807.	5601.1								

Sample Name: 280-69790-C-1-C Acquired: 5/28/2015 18:49:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.00536	.00083	.00129	.07463	.00013	-.00297	129.10	.00018
Stddev	.00012	.00461	.00026	.00102	.00076	.00008	.00025	1.07	.00005
%RSD	46.237	85.943	31.159	78.857	1.0182	58.823	8.3628	.83030	24.710
#1	.00033	.00862	.00064	.00057	.07517	.00018	-.00279	129.86	.00015
#2	.00017	.00210	.00101	.00202	.07410	.00008	-.00314	128.34	.00021
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.00002	-.00025	.40612	4.0462	.07174	1.7962	.00059	-.00004
Stddev	.00025	.00011	.00085	.00174	.0660	.00165	2.4949	.00064	.00000
%RSD	182.77	571.32	344.23	.42925	1.6308	2.2951	138.90	108.90	3.4062
#1	.00004	-.00006	.00035	.40735	4.0929	.07291	3.5603	.00104	-.00004
#2	-.00031	.00010	-.00085	.40488	3.9996	.07058	.03199	.00014	-.00004
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.073	.00059	.00006	-.00276	.02838	.00330	.00167	4.6511	9.9534
Stddev	.015	.00005	.00103	.00037	.00383	.00252	.00049	.0710	.1519
%RSD	.02596	8.8927	1844.0	13.465	13.499	76.286	29.570	1.5262	1.5262
#1	56.063	.00063	.00079	-.00303	.03109	.00152	.00132	4.7013	10.061
#2	56.083	.00055	-.00067	-.00250	.02568	.00508	.00202	4.6009	9.8460
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00136	2.0676	.00032	-.00019	.00039	-.03318	.00007	.00014	.00428
Stddev	.00000	.0208	.00088	.00092	.00025	.01818	.00022	.00033	.00092
%RSD	.13378	1.0041	275.14	487.56	65.143	54.781	329.03	233.45	21.394
#1	-.00136	2.0823	.00094	.00046	.00021	-.02033	.00022	.00037	.00363
#2	-.00136	2.0529	-.00030	-.00084	.00057	-.04603	-.00009	-.00009	.00493
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3426.9	59539.	5912.6						
Stddev	.1	152.	23.4						
%RSD	.00226	.25531	.39512						
#1	3426.9	59431.	5896.1						
#2	3427.0	59646.	5929.1						

Sample Name: 280-69790-C-2-C Acquired: 5/28/2015 18:51:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00108	.05219	-.00163	.13555	.09983	.00008	-.00464	132.12	.00059
#2	.00041	.05109	-.00011	.13673	.09959	-.00007	-.00424	132.66	.00031
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00038	.00013	.00220	.20802	5.1808	.07244	55.091	.03195	.00636
#2	.00012	.00027	.00256	.20808	5.2619	.07529	55.245	.03276	.00614
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	66.802	.01057	.02045	.00399	166.86	.00439	.01263	3.1893	6.8250
#2	67.592	.01107	.01843	.00484	166.14	.00196	.01003	3.2380	6.9293
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00112	1.9965	-.00069	.00172	-.00509	-.00797	-.00043	.00350	.00067
#2	.00004	2.0068	-.00168	.00186	-.01038	-.03895	-.00050	.00247	.00076
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3102.4	53515.	5534.2						
#2	3085.5	53626.	5557.8						

Sample Name: 280-69790-C-3-C Acquired: 5/28/2015 18:54:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	.08132	-.00144	.15726	.10539	.00004	-.00295	157.03	.00030
Stddev	.00085	.00075	.00513	.00008	.00033	.00002	.00369	.82	.00009
%RSD	51528.	.92525	356.38	.04929	.31731	55.367	125.20	.52501	30.566
#1	.00060	.08185	.00219	.15731	.10563	.00005	-.00034	157.61	.00023
#2	-.00060	.08079	-.00507	.15720	.10516	.00002	-.00556	156.45	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.00039	.00256	.14528	5.3783	.08510	66.869	.04663	.00605
Stddev	.00017	.00002	.00062	.00025	.0260	.00215	.205	.00024	.00018
%RSD	143.32	5.8301	24.054	.16924	.48418	2.5253	.30717	.51848	2.9716
#1	.00024	.00038	.00300	.14510	5.3967	.08662	66.723	.04646	.00618
#2	-.00000	.00041	.00212	.14545	5.3599	.08358	67.014	.04680	.00592
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	79.521	.01159	.03238	.00451	W 195.95	.00583	.01061	3.3183	7.1012
Stddev	.081	.00047	.00048	.00184	.02	.00013	.00605	.0070	.0150
%RSD	.10127	4.0948	1.4733	40.827	.01070	2.1930	57.056	.21082	.21082
#1	79.464	.01193	.03271	.00581	195.96	.00592	.01489	3.3233	7.1118
#2	79.578	.01126	.03204	.00321	195.93	.00574	.00633	3.3134	7.0906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	2.2424	-.00039	.00191	-.00603	-.02396	-.00031	.00187	.00008
Stddev	.00108	.0142	.00143	.00029	.00282	.03336	.00024	.00021	.00191
%RSD	500.82	.63307	368.37	15.192	46.869	139.22	77.615	10.975	2449.8
#1	.00098	2.2524	.00062	.00211	-.00403	-.04755	-.00048	.00173	-.00127
#2	-.00055	2.2323	-.00140	.00170	-.00802	-.00037	-.00014	.00202	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3116.7	53515.	5580.0						
Stddev	1.8	179.	36.7						
%RSD	.05766	.33470	.65729						
#1	3117.9	53641.	5554.0						
#2	3115.4	53388.	5605.9						

Sample Name: 280-69790-C-4-C Acquired: 5/28/2015 18:56:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	.04298	-.00263	.14463	.09930	.00002	-.00469	133.10	.00051
Stddev	.00013	.00018	.00117	.00102	.00119	.00003	.00163	.75	.00009
%RSD	125.26	.42164	44.352	.70626	1.1999	156.19	34.671	.56596	16.922
#1	-.00001	.04286	-.00180	.14535	.09846	.00005	-.00585	132.57	.00045
#2	-.00020	.04311	-.00345	.14390	.10015	.00000	-.00354	133.64	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.00053	.00224	.28684	5.3069	.07650	56.459	.04127	.00664
Stddev	.00006	.00033	.00025	.00576	.0569	.00006	.126	.00056	.00025
%RSD	13.406	61.307	11.236	2.0071	1.0719	.07210	.22277	1.3548	3.7335
#1	.00037	.00030	.00206	.28277	5.2667	.07646	56.548	.04166	.00646
#2	.00045	.00076	.00242	.29091	5.3471	.07654	56.370	.04087	.00681
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	71.609	.01206	.02054	.00526	172.11	.00282	.01501	3.0243	6.4720
Stddev	.551	.00007	.00098	.00236	.42	.00350	.00091	.0465	.0995
%RSD	.77001	.59365	4.7703	44.898	.24151	124.21	6.0451	1.5374	1.5374
#1	71.219	.01211	.01984	.00359	172.40	.00034	.01566	2.9914	6.4017
#2	71.999	.01201	.02123	.00694	171.82	.00530	.01437	3.0572	6.5424
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00187	2.0365	.00044	.00166	-.00794	-.01499	-.00045	.00171	.00157
Stddev	.00137	.0137	.00231	.00058	.00049	.00642	.00065	.00059	.00004
%RSD	73.300	.67492	523.29	35.087	6.1535	42.843	145.34	34.696	2.4923
#1	.00284	2.0268	-.00119	.00125	-.00760	-.01953	.00001	.00213	.00160
#2	.00090	2.0462	.00207	.00208	-.00829	-.01045	-.00091	.00129	.00154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3206.7	54951.	5663.3						
Stddev	6.9	188.	11.3						
%RSD	.21540	.34165	.19982						
#1	3211.6	54818.	5655.3						
#2	3201.9	55084.	5671.3						

Sample Name: 280-69798-H-1-C Acquired: 5/28/2015 18:59:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00007	.01260	-.00445	.16799	.13655	-.00010	.00020	1.6488	.00023
#2	.00052	.01112	-.00275	.16639	.13798	.00000	-.00438	1.6784	-.00026
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	344.00	.00089	.02835	-.00103	12.855	.00090	.00318	4.4743	9.5751
#2	2.02	.00021	.00281	.00074	.028	.00114	.00325	.0011	.0024
%RSD	.58813	23.556	9.9260	72.227	.22113	127.01	102.46	.02531	.02531
#1	342.57	.00104	.02636	-.00050	12.875	.00171	.00087	4.4751	9.5768
#2	345.43	.00074	.03034	-.00155	12.834	.00009	.00548	4.4735	9.5734
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00022	.08987	-.00022	.00076	-.00019	.02418	-.00117	.00278	.00160
#2	.00111	.09068	.00117	.00032	-.00092	-.04067	-.00102	.00251	.00226
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3174.7	53347.	5728.0						
#2	3147.0	53356.	5591.2						

Sample Name: 280-69667-A-1-D MS Acquired: 5/28/2015 19:01:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm W 2.9161	As1890 ppm .97721	B_2089 ppm 1.0450	Ba4554 ppm 1.9475	Be3130 ppm .04574	Bi2230 ppm F 1.9759	Ca3179 ppm 71.432	Cd2288 ppm .10026
#1	.04535	2.8993	.97329	1.0456	1.9335	.04577	1.9748	70.917	.10003
#2	.04439	2.9329	.98112	1.0443	1.9616	.04572	1.9770	71.946	.10050
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .19194	Cu3247 ppm .24329	Fe2599 ppm 1.1281	K_7664 ppm 52.749	Li6707 ppm .98650	Mg2790 ppm 51.572	Mn2576 ppm .51512	Mo2020 ppm 1.0109
#1	.47672	.19216	.24330	1.1271	52.306	.97687	51.659	.51602	1.0087
#2	.47747	.19173	.24328	1.1290	53.191	.99612	51.485	.51422	1.0130
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 69.322	P_1782 ppm 47917	Pb2203 ppm W 10.262	S_1820 ppm .47921	Sb2068 ppm 7.5677	Se1960 ppm .50770	Si2881 ppm 1.9874	SiO2 ppm 27.839
#1	69.397	.47953	10.249	.47881	7.5579	.50590	1.9907	27.779	59.448
#2	69.248	.47882	10.275	.47960	7.5775	.50950	1.9842	27.899	59.703
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 1.9642	Th2837 ppm 1.1542	Ti3349 ppm .99011	Tl1908 ppm .99459	U_3701 ppm 1.9149	V_2924 ppm 2.0362	Zn2062 ppm .50910	Zr3391 ppm .48763
#1	1.9591	1.1458	.98740	.99337	1.9137	2.0311	.50947	.48743	.43749
#2	1.9693	1.1627	.99283	.99581	1.9160	2.0414	.50873	.48783	.44332
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3166.8	Y_3774 Cts/S 54011.	377.433 {89}					
#1	3175.5	53922.	5528.4						
#2	3158.0	54100.	5450.7						

Sample Name: 280-69667-A-1-E MSD Acquired: 5/28/2015 19:04:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W 2.6110	Al3092 ppm W 2.8944	As1890 ppm .95464	B_2089 ppm 1.0344	Ba4554 ppm 1.9153	Be3130 ppm .04480	Bi2230 ppm F 1.9581	Ca3179 ppm 69.149
#1	.04444	2.6098	2.8486	.95253	1.0355	1.9015	.04421	1.9582	68.650
#2	.04353	2.6122	2.9403	.95674	1.0333	1.9292	.04539	1.9580	69.649
Check ? High Limit Low Limit	Chk Pass	Chk Warn 2.5000 -.05000	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 ppm .46914	Cr2055 ppm W .19110	Cu3247 ppm .23921	Fe2599 ppm 1.1270	K_7664 ppm 51.899	Li6707 ppm .97266	Mg2790 ppm 50.310	Mn2576 ppm .50762
#1	.09916	.46855	.19155	.24013	1.1159	51.459	.96400	50.457	.50941
#2	.09895	.46973	.19066	.23829	1.1381	52.338	.98133	50.162	.50582
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 ppm 67.846	Ni2316 ppm .47025	P_1782 ppm W 10.133	Pb2203 ppm .47126	S_1820 ppm 7.2757	Sb2068 ppm .50139	Se1960 ppm 1.9697	Si2881 ppm 26.910
#1	.99424	66.909	.47038	10.118	.47130	7.2468	.49912	1.9639	26.561
#2	.99397	68.784	.47012	10.148	.47122	7.3047	.50367	1.9755	27.260
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 ppm 1.9311	Sr4077 ppm 1.1301	Th2837 ppm .97446	Ti3349 ppm .98245	Tl1908 ppm 1.8836	U_3701 ppm 2.0224	V_2924 ppm .50307	Zn2062 ppm .48101
#1	56.840	1.9226	1.1205	.97685	.98373	1.8732	2.0168	.50542	.48259
#2	58.337	1.9396	1.1398	.97207	.98118	1.8940	2.0280	.50072	.47943
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.43307								
#2	.44203								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69667-A-1-E MSD Acquired: 5/28/2015 19:04:16 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279222 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3208.9	54606.	5556.5
Stddev	.5	424.	49.0
%RSD	.01613	.77685	.88270
#1	3208.5	54306.	5591.2
#2	3209.3	54906.	5521.8

Sample Name: CCVH-3283796 Acquired: 5/28/2015 19:06:35 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00531	48.273	-.00411	.00326	.00093	.00032	1.0166	.04199	-.00010	-.00044	.00051	.00101	47.240
Stddev	.00026	.863	.00131	.00022	.00028	.00014	.0013	.00487	.00009	.00019	.00018	.00037	.474
%RSD	4.8893	1.7868	31.816	6.7946	30.251	43.926	.13148	11.599	83.886	44.014	34.584	36.740	1.0043
#1	-.00549	47.663	-.00319	.00311	.00073	.00042	1.0157	.03854	-.00016	-.00030	.00064	.00075	46.904
#2	-.00513	48.883	-.00504	.00342	.00113	.00022	1.0176	.04543	-.00004	-.00058	.00039	.00127	47.575

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.12490	.00310	.05520	-.00143	-.00025	253.46	.00298	.00224	.00100	4.9904	-.01261	.01326	.02293
Stddev	.00746	.00035	.00579	.00008	.00027	4.42	.00015	.00166	.00129	.0034	.00076	.00053	.00031
%RSD	5.9687	11.207	10.497	5.7908	109.77	1.7455	5.0771	74.127	128.49	.06795	6.0544	3.9902	1.3645
#1	.13017	.00334	.05930	-.00138	-.00044	250.33	.00288	.00341	.00192	4.9880	-.01315	.01364	.02270
#2	.11963	.00285	.05111	-.00149	-.00006	256.59	.00309	.00107	.00009	4.9928	-.01207	.01289	.02315

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.04906	-.00270	.00056	5.0056	-.01279	.00285	10.383	.00347	-.00075	-.13554
Stddev	.00067	.00130	.00013	.0019	.00017	.00135	.014	.00088	.00045	.00182
%RSD	1.3645	48.154	23.116	.03798	1.3437	47.487	.13219	25.307	60.477	1.3411
#1	.04859	-.00178	.00047	5.0069	-.01267	.00380	10.373	.00409	-.00107	-.13683
#2	.04953	-.00362	.00065	5.0043	-.01291	.00189	10.392	.00285	-.00043	-.13426

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3235.3	54300.	5570.0
Stddev	3.4	69.	114.3
%RSD	.10459	.12673	2.0514
#1	3232.9	54252.	5650.8
#2	3237.7	54349.	5489.2

Sample Name: CCV-3290307 Acquired: 5/28/2015 19:09:06 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48367	.51095	.99126	.50818	.47862	.45989	-.00260	4.6669	.50237	.49998	.49983	.48576	2.2742
Stddev	.00113	.00075	.00584	.00087	.00132	.00117	.00239	.0142	.00012	.00016	.00035	.00037	.0006
%RSD	.23358	.14627	.58939	.17081	.27548	.25500	91.934	.30350	.02368	.03138	.06941	.07674	.02722

#1	.48447	.51148	.98713	.50757	.47769	.45906	-.00430	4.6569	.50228	.50010	.50008	.48550	2.2738
#2	.48287	.51043	.99540	.50879	.47955	.46072	-.00091	4.6769	.50245	.49987	.49959	.48603	2.2747

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.431	.98120	19.456	.50247	.49060	5.0891	.49911	1.0090	1.0017	.01569	.99920	1.0057	4.7022
Stddev	.051	.00071	.036	.00084	.00084	.0081	.00068	.0032	.0016	.00010	.00002	.0007	.0232
%RSD	.10304	.07220	.18349	.16816	.17094	.15915	.13655	.31889	.15537	.66067	.00209	.06935	.49283

#1	49.395	.98070	19.482	.50306	.49001	5.0949	.49959	1.0067	1.0006	.01562	.99922	1.0062	4.7186
#2	49.467	.98170	19.431	.50187	.49120	5.0834	.49862	1.0112	1.0028	.01577	.99919	1.0052	4.6858

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.063	.99078	.47795	-.00466	.49151	1.0201	-.00547	.50859	.50297	.46448			
Stddev	.050	.00284	.00076	.00004	.00164	.0037	.00158	.00167	.00182	.00120			
%RSD	.49283	.28647	.15990	.89470	.33462	.35746	28.885	.32918	.36268	.25938			

#1	10.098	.99278	.47741	-.00469	.49267	1.0176	-.00435	.50977	.50168	.46533			
#2	10.028	.98877	.47849	-.00463	.49035	1.0227	-.00659	.50740	.50426	.46362			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass		
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3297.4	55749.	5520.5										
Stddev	1.8	211.	21.3										
%RSD	.05358	.37765	.38647										

#1	3298.6	55601.	5505.4										
#2	3296.1	55898.	5535.6										

Sample Name: CCB Acquired: 5/28/2015 19:11:31 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.0019	-0.0141	-0.0149	.00197	-0.00013	.00005	-0.0357	-0.0322	.00010	-0.00017	-0.00007	.00003	-0.00187
Stddev	.00018	.00029	.00425	.00006	.00025	.00006	.00164	.00279	.00001	.00018	.00010	.00005	.00063
%RSD	97.795	20.289	285.99	3.0512	193.30	116.19	45.872	86.602	12.856	105.57	135.18	200.18	33.662
#1	-.00006	-.00161	.00152	.00193	.00005	.00009	-.00241	-.00519	.00011	-.00004	.00000	.00006	-.00143
#2	-.00032	-.00121	-.00449	.00201	-.00030	.00001	-.00472	-.00125	.00009	-.00030	-.00014	-.00001	-.00232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.07270	.00084	-.00053	-.00003	-.00002	.12753	.00020	-.00044	-.00130	.00653	.00168	.00404	.03184
Stddev	.02501	.00012	.00208	.00005	.00026	.00035	.00002	.00135	.00166	.00647	.00025	.00923	.02420
%RSD	34.398	13.877	392.08	172.66	1499.6	.27362	11.933	306.56	127.51	99.028	15.125	228.42	76.025
#1	.09038	.00093	-.00200	-.00007	-.00020	.12729	.00018	.00051	-.00013	.00196	.00186	-.00249	.04895
#2	.05501	.00076	.00094	.00001	.00016	.12778	.00021	-.00139	-.00248	.01110	.00150	.01057	.01472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.06813	.00022	.00004	.00041	-.00002	.00011	-.02446	.00029	-.00022	.00022			
Stddev	.05180	.00051	.00001	.00056	.00021	.00055	.01454	.00015	.00004	.00168			
%RSD	76.025	227.97	29.374	137.54	943.21	501.53	59.436	52.421	18.454	777.54			
#1	.10476	-.00014	.00003	.00080	.00013	.00050	-.03474	.00018	-.00024	.00140			
#2	.03151	.00058	.00005	.00001	-.00017	-.00028	-.01418	.00040	-.00019	-.00097			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Units	3307.4	57315.	5489.0										
Avg	5.9	92.	32.1										
Stddev	.17864	.16072	.58437										
#1	3311.6	57380.	5466.4										
#2	3303.2	57250.	5511.7										

Sample Name: CCVL3296658 Acquired: 5/28/2015 19:13:47 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	F .00018	F -.00115	F -.00340	F .00123	F .00214	F .00031	F -.00325	F .04346	F .00021	F -.00017	F .00011
Stddev	.00072	.00012	.00084	.00017	.00289	.00026	.00059	.06476	.00001	.00007	.00014
%RSD	411.76	10.788	24.798	14.064	135.57	85.818	18.185	149.01	4.9281	42.873	122.67
#1	-.00034	-.00123	-.00400	.00136	.00418	.00049	-.00284	.08925	.00021	-.00022	.00021
#2	.00069	-.00106	-.00280	.00111	.00009	.00012	-.00367	-.00233	.00022	-.00012	.00001
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .00100 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .00500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01000 -30.000%
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	F -.00054	F .02012	F .71835	F .00302	F -.00226	F -.00002	F -.00009	F .32736	F .00064	F -.00034	F -.00071
Stddev	.00011	.02954	.93644	.00383	.00312	.00006	.00031	.32690	.00027	.00095	.00105
%RSD	19.617	146.83	130.36	126.87	138.00	321.58	350.50	99.862	42.791	275.64	148.63
#1	-.00046	.04101	1.3805	.00572	-.00447	-.00006	.00013	.55851	.00083	.00033	-.00145
#2	-.00061	-.00077	.05619	.00031	-.00005	.00002	-.00030	.09620	.00044	-.00102	.00004
Check ? Value Range	Chk Fail .01500 -30.000%	Chk Fail .10000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .20000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail 1.0000 -30.000%	Chk Fail .04000 -30.000%	Chk Fail 3.0000 -30.000%	Chk Fail .00900 -30.000%
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	.00575	F -.00033	F .00102	F .12509	F .26769	F .00079	F .00225	F -.00042	F .00014	F .00283	F .01053
Stddev	.00482	.00213	.00616	.14735	.31532	.00040	.00302	.00033	.00015	.00075	.00001
%RSD	83.706	654.80	601.91	117.79	117.79	50.558	134.27	80.181	107.43	26.501	.10544
#1	.00235	.00118	.00538	.22928	.49066	.00107	.00439	-.00065	.00003	.00230	.01054
#2	.00916	-.00183	-.00333	.02090	.04472	.00051	.00011	-.00018	.00024	.00336	.01052
Check ? Value Range	None	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .50000 -30.000%	Chk Fail 1.0700 -30.000%	Chk Fail .10000 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .01000 -30.000%	Chk Fail .01500 -30.000%	Chk Fail .06000 -30.000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	F .00005	F -.00033	F .00465								
Stddev	.00037	.00038	.00711								
%RSD	691.87	113.25	152.97								
#1	.00032	-.00007	.00967								
#2	-.00021	-.00060	-.00038								
Check ? Value Range	Chk Fail .01000 -30.000%	Chk Fail .02000 -30.000%	Chk Fail .01500 -30.000%								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3326.1	57361.	5569.1								
Stddev	3.2	23.	45.1								
%RSD	.09705	.04014	.80920								
#1	3328.4	57377.	5601.0								
#2	3323.9	57345.	5537.3								

Sample Name: CCVH-3283796 Acquired: 5/28/2015 22:21:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00535	48.308	-.00198	-.00065	.00065	.00003	.98535	.03260	-.00025	-.00057	.00060	.00373	47.516
Stddev	.00078	.098	.00139	.00022	.00043	.00002	.00258	.00361	.00026	.00050	.00011	.00075	.037
%RSD	14.596	.20332	69.969	34.196	65.949	70.527	.26190	11.086	104.86	87.447	19.061	20.198	.07718
#1	-.00480	48.377	-.00100	-.00049	.00095	.00002	.98353	.03516	-.00044	-.00092	.00052	.00320	47.542
#2	-.00590	48.238	-.00296	-.00080	.00035	.00005	.98717	.03005	-.00007	-.00022	.00068	.00427	47.490

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.05683	.00063	.03443	-.00143	-.00068	260.70	.00231	.00198	.00065	4.8811	-.00847	.01004	.00029
Stddev	.03260	.00062	.00420	.00004	.00025	.38	.00064	.00127	.00008	.0309	.00012	.00004	.00127
%RSD	57.364	98.706	12.193	2.4608	36.730	.14463	27.483	64.019	12.613	.63241	1.4726	.36363	435.77
#1	.07988	.00106	.03739	-.00145	-.00051	260.97	.00276	.00109	.00071	4.8593	-.00856	.01007	.00119
#2	.03378	.00019	.03146	-.00140	-.00086	260.44	.00186	.00288	.00060	4.9030	-.00838	.01002	-.00061

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00062	-.00231	.00028	4.9397	-.01505	.00119	10.194	.00284	-.00013	-.12240
Stddev	.00272	.00009	.00001	.0086	.00051	.00275	.042	.00001	.00006	.00177
%RSD	435.77	3.9781	3.3764	.17414	3.4017	230.89	.41421	.32992	49.517	1.4474
#1	.00255	-.00238	.00029	4.9337	-.01542	-.00075	10.164	.00284	-.00008	-.12114
#2	-.00130	-.00225	.00027	4.9458	-.01469	.00314	10.224	.00285	-.00017	-.12365

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3226.5	53192.	5032.6
Stddev	6.0	266.	3.0
%RSD	.18660	.50005	.05928
#1	3222.3	53004.	5030.5
#2	3230.8	53381.	5034.7

Sample Name: CCV-3290307 Acquired: 5/28/2015 22:24:05 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48829	.50561	.96685	.48108	.49178	.46900	-.00543	4.8058	.48811	.49443	.49776	.48900	2.2919
Stddev	.00354	.00499	.00090	.00078	.00087	.00064	.00292	.0063	.00102	.00047	.00139	.00125	.0078
%RSD	.72597	.98785	.09305	.16205	.17682	.13728	53.720	.13030	.20891	.09444	.27872	.25476	.33875
#1	.49079	.50914	.96621	.48163	.49116	.46854	-.00337	4.8102	.48739	.49476	.49678	.48988	2.2864
#2	.48578	.50208	.96749	.48053	.49239	.46945	-.00749	4.8014	.48883	.49410	.49874	.48812	2.2974

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.996	1.0088	19.844	.49402	.48275	5.0943	.49465	.95900	.99749	.00004	.95989	.96586	4.7465
Stddev	.135	.0043	.046	.00188	.00103	.0521	.00052	.00100	.00116	.00292	.00196	.00586	.0218
%RSD	.26376	.42688	.23140	.38049	.21394	1.0223	.10440	.10409	.11631	6715.3	.20438	.60641	.45847
#1	50.901	1.0058	19.877	.49535	.48348	5.0575	.49502	.95970	.99667	-.00202	.95850	.96171	4.7311
#2	51.092	1.0118	19.812	.49269	.48202	5.1311	.49429	.95829	.99831	.00211	.96128	.97000	4.7619

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.157	.98093	.48658	-.00274	.48664	1.0083	-.03340	.49255	.49847	.48186			
Stddev	.047	.00247	.00075	.00182	.00136	.0014	.02522	.00196	.00073	.00221			
%RSD	.45847	.25216	.15357	66.183	.27940	.13537	75.520	.39697	.14552	.45937			
#1	10.125	.97918	.48605	-.00146	.48760	1.0073	-.05123	.49394	.49898	.48029			
#2	10.190	.98268	.48711	-.00403	.48568	1.0093	-.01556	.49117	.49795	.48342			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3325.8	55885.	5314.6										
Stddev	9.3	291.	15.9										
%RSD	.28098	.52055	.29924										
#1	3319.2	55679.	5303.3										
#2	3332.4	56091.	5325.8										

Sample Name: CCB Acquired: 5/28/2015 22:26:36 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00079	.00049	-.00463	-.00029	.00004	-.00001	-.00111	.00267	.00017	-.00035	-.00003	-.00018	-.00059
Stddev	.00020	.00062	.00133	.00017	.00026	.00010	.00270	.00146	.00005	.00003	.00028	.00069	.00107
%RSD	25.125	127.01	28.722	56.843	597.41	1840.0	242.87	54.791	27.214	7.8350	1033.5	378.93	182.25
#1	.00093	.00093	-.00369	-.00018	-.00014	.00007	-.00302	.00370	.00020	-.00037	-.00022	-.00067	.00017
#2	.00065	.00005	-.00557	-.00041	.00023	-.00008	.00080	.00163	.00014	-.00033	.00017	.00030	-.00135

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.06355	.00036	.00048	.00005	.00014	.06734	-.00044	-.00083	-.00042	.00568	.00263	.00395	.00942
Stddev	.01340	.00176	.00287	.00005	.00012	.00621	.00066	.00044	.00167	.00544	.00266	.00095	.02675
%RSD	21.079	488.76	601.00	110.10	83.957	9.2194	148.32	52.769	396.61	95.788	100.93	23.993	284.02
#1	.07302	-.00088	-.00155	.00001	.00006	.06295	.00002	-.00052	-.00160	.00183	.00075	.00462	-.00950
#2	.05408	.00161	.00251	.00008	.00023	.07173	-.00091	-.00114	.00076	.00953	.00451	.00328	.02834

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.02016	-.00004	.00008	.00104	-.00021	.00235	-.02212	-.00051	-.00100	-.00267			
Stddev	.05725	.00019	.00014	.00016	.00027	.00081	.01456	.00003	.00030	.00107			
%RSD	284.02	493.51	176.53	15.701	125.05	34.429	65.814	5.7593	30.305	40.050			
#1	-.02032	-.00017	.00017	.00093	-.00040	.00292	-.01182	-.00049	-.00121	-.00343			
#2	.06064	.00010	-.00002	.00116	-.00002	.00178	-.03241	-.00053	-.00079	-.00191			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3295.1	56218.	5199.3										
Stddev	23.6	170.	5.9										
%RSD	.71650	.30205	.11338										
#1	3311.8	56098.	5203.5										
#2	3278.4	56338.	5195.1										

Sample Name: CCVL3296658 Acquired: 5/28/2015 22:29:00 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01020	.10576	.01589	.09976	.00979	.00103	.10627	.19440	.00499	.01004	.01043	.01533
Stddev	.00021	.00047	.00001	.00086	.00025	.00009	.00272	.00190	.00001	.00017	.00023	.00035
%RSD	2.0378	.44282	.08529	.85911	2.6028	8.3093	2.5586	.97642	.28501	1.6610	2.2331	2.2967
#1	.01005	.10543	.01590	.09915	.00961	.00097	.10819	.19574	.00498	.00992	.01027	.01557
#2	.01035	.10610	.01588	.10036	.00997	.00109	.10435	.19306	.00500	.01016	.01060	.01508

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08968	3.2192	.01148	.21838	.01027	.01903	1.0931	.04176	2.8969	.00870	.00388	.00925
Stddev	.00003	.0396	.00009	.00083	.00009	.00023	.0128	.00002	.0021	.00012	.00188	.00053
%RSD	.03774	1.2288	.76584	.38151	.83721	1.2008	1.1710	.05700	.07094	1.3315	48.475	5.7703
#1	.08971	3.1912	.01142	.21779	.01021	.01919	1.0840	.04174	2.8983	.00879	.00255	.00887
#2	.08966	3.2471	.01154	.21897	.01033	.01886	1.1021	.04178	2.8954	.00862	.00521	.00962

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .02065	.50545	1.0817	.10279	.01007	.01451	.00964	.01879	.04437	.00953	.02204	.01495
Stddev	.00361	.01810	.0387	.00056	.00019	.00022	.00050	.00089	.01264	.00010	.00091	.00041
%RSD	17.502	3.5804	3.5804	.54412	1.9048	1.5170	5.1864	4.7229	28.486	1.0915	4.1457	2.7534
#1	.01810	.51825	1.1090	.10239	.01020	.01435	.00928	.01942	.05331	.00946	.02268	.01466
#2	.02321	.49265	1.0543	.10318	.00993	.01467	.00999	.01816	.03543	.00960	.02139	.01524

Check ? Value Range	Chk Fail .01500 30.000%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3402.4	57658.	5420.4									
Stddev	14.7	353.	54.1									
%RSD	.43291	.61157	.99727									
#1	3392.0	57908.	5382.2									
#2	3412.9	57409.	5458.6									

Sample Name: MB 280-279209/1-A Acquired: 5/28/2015 22:31:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.00636	-.00713	-.00048	.00035	.00001	-.00345	W .15476	.00035
Stddev	.00055	.00022	.00092	.00030	.00010	.00001	.00186	.00271	.00002
%RSD	125.41	3.4891	12.919	61.851	30.012	134.17	53.769	1.7542	6.2174
#1	.00005	.00620	-.00648	-.00027	.00027	.00000	-.00476	.15284	.00037
#2	.00082	.00652	-.00778	-.00069	.00042	.00002	-.00214	.15668	.00033
Check ?	Chk Pass	Chk Warn	Chk Pass						
High Limit								.10000	
Low Limit								-.10000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00063	.00071	.01930	.06415	.00205	.05476	.00039	-.00027
Stddev	.00012	.00003	.00002	.00001	.04766	.00112	.00267	.00003	.00002
%RSD	122.14	4.0496	3.0617	.04117	74.305	54.594	4.8797	7.8346	8.3629
#1	-.00001	.00065	.00069	.01930	.03044	.00284	.05665	.00041	-.00025
#2	-.00018	.00061	.00072	.01929	.09785	.00126	.05287	.00037	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14696	.00091	.00917	-.00112	.00478	.00086	.00590	.03457	.07397
Stddev	.01061	.00029	.00014	.00078	.00048	.00160	.00032	.00079	.00169
%RSD	7.2219	31.636	1.5777	70.190	10.026	186.44	5.3532	2.2857	2.2857
#1	.15447	.00112	.00927	-.00056	.00444	.00199	.00613	.03401	.07278
#2	.13946	.00071	.00906	-.00167	.00511	-.00027	.00568	.03513	.07517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00615	.00034	.00129	.00042	.00217	-.03097	-.00112	.00240	.00115
Stddev	.00001	.00001	.00053	.00003	.00047	.02417	.00004	.00021	.00030
%RSD	.21474	1.8737	41.293	6.5366	21.584	78.056	3.5932	8.8284	25.939
#1	.00614	.00033	.00091	.00040	.00250	-.01388	-.00115	.00255	.00094
#2	.00616	.00034	.00167	.00044	.00184	-.04806	-.00110	.00225	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3373.4	57504.	5432.4						
Stddev	2.2	36.	29.6						
%RSD	.06402	.06253	.54507						
#1	3374.9	57529.	5453.4						
#2	3371.9	57478.	5411.5						

Sample Name: LCS 280-279209/2-A Acquired: 5/28/2015 22:34:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04450	1.9232	.95843	.95014	1.9244	.04643	1.9333	46.327	.09835
#2	.04424	1.9116	.95521	.94957	1.9297	.04590	1.9459	46.254	.09815
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48343	.18819	.24366	.92048	50.456	.99078	47.988	.48666	1.0117
#2	.48065	.18991	.24309	.92148	50.426	.99434	47.980	.48772	1.0077
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05700 .04350	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	51.724	.48285	10.022	.49104	1.9771	.49339	1.9406	.62542	1.3384
#2	52.080	.48116	9.9770	.48952	1.9957	.48910	1.9360	.63428	1.3574
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail 7.0000 1.0000	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9672	.95281	.96991	.96996	1.9427	2.0250	.49002	.48482	.45241
#2	1.9644	.95517	.97241	.96685	1.9383	1.9976	.48838	.49049	.44959
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3167.1	54161.	5309.0						
#2	3199.1	53649.	5349.6						

Sample Name: 280-69730-A-1-A Acquired: 5/28/2015 22:36:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00092	84.778	.06621	.04489	1.4602	.00495	-.00532	137.75	.01942
Stddev	.00025	.102	.00082	.00150	.0008	.00009	.00065	.29	.00036
%RSD	27.180	.12040	1.2326	3.3408	.05667	1.8055	12.247	.21208	1.8753
#1	-.00109	84.850	.06679	.04595	1.4608	.00501	-.00486	137.95	.01967
#2	-.00074	84.706	.06563	.04383	1.4596	.00489	-.00578	137.54	.01916
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03300	W .11114	.20578	107.84	19.566	.11703	26.114	2.2267	.08531
Stddev	.00022	.00078	.00058	.78	.038	.00084	.060	.0078	.00066
%RSD	.66615	.69955	.28174	.72724	.19669	.71984	.22877	.35030	.77374
#1	.03316	.11169	.20537	107.29	19.593	.11763	26.071	2.2212	.08485
#2	.03284	.11059	.20619	108.40	19.539	.11644	26.156	2.2323	.08578
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.6057	.08089	W 4.9045	.17851	5.9269	-.00109	.00505	3.9465	8.4455
Stddev	.0020	.00077	.0319	.00275	.0453	.00284	.00555	.0386	.0826
%RSD	.05545	.95562	.65117	1.5415	.76400	260.42	109.85	.97828	.97828
#1	3.6043	.08144	4.9271	.18045	5.9589	-.00310	.00113	3.9192	8.3871
#2	3.6071	.08035	4.8820	.17656	5.8949	.00092	.00898	3.9738	8.5039
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-1.0000							
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02078	.50014	.07995	2.0631	-.00342	F -.10063	.23312	.80267	.07264
Stddev	.00006	.00086	.00147	.0023	.00085	.02507	.00195	.00505	.00047
%RSD	.27712	.17173	1.8332	.11150	24.891	24.909	.83820	.62858	.65129
#1	.02074	.50074	.08099	2.0615	-.00403	-.11836	.23174	.79911	.07230
#2	.02082	.49953	.07891	2.0648	-.00282	-.08291	.23450	.80624	.07297
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass				
High Limit						50.000			
Low Limit						-.10000			
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3629.6	60519.	6050.2						
Stddev	20.5	271.	7.6						
%RSD	.56361	.44743	.12493						
#1	3644.1	60711.	6044.9						
#2	3615.1	60328.	6055.6						

Sample Name: 280-69749-A-2-F Acquired: 5/28/2015 22:39:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	106.43	.01640	.00612	.94644	.00562	.00468	24.163	.00174
Stddev	.00075	1.36	.00513	.00051	.01155	.00016	.00135	.283	.00007
%RSD	224.42	1.2796	31.310	8.3617	1.2200	2.8138	28.837	1.1694	4.1763
#1	.00020	105.46	.01277	.00575	.93828	.00551	-.00373	23.963	.00179
#2	-.00086	107.39	.02002	.00648	.95461	.00573	-.00563	24.363	.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06032	W .16103	.09307	126.40	13.562	.07041	24.262	3.1154	.00141
Stddev	.00039	.00117	.00084	.65	.040	.00106	.049	.0044	.00018
%RSD	.65258	.72673	.89944	.51659	.29140	1.4983	.20096	.13980	13.071
#1	.06005	.16020	.09248	125.93	13.590	.06967	24.296	3.1184	.00154
#2	.06060	.16186	.09367	126.86	13.534	.07116	24.227	3.1123	.00128
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.01000								
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8749	.09980	W 2.0409	.06086	.54273	W -.01057	.01147	3.5251	7.5437
Stddev	.0440	.00036	.0006	.00009	.00011	.00310	.00310	.0024	.0052
%RSD	.90162	.36196	.03197	.14985	.02018	29.359	27.024	.06889	.06889
#1	4.8438	.09954	2.0414	.06080	.54281	-.00837	.01367	3.5268	7.5474
#2	4.9060	.10005	2.0404	.06093	.54266	-.01276	.00928	3.5234	7.5400
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000					2.0000			
Low Limit	-1.0000					-.01000			
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01277	.21008	.04015	.86737	-.00020	W -.09209	.22791	.31594	.02318
Stddev	.00080	.00192	.00225	.00349	.00227	.00545	.00041	.00184	.00275
%RSD	6.2422	.91281	5.5924	.40248	1114.9	5.9173	.18140	.58095	11.867
#1	.01220	.20872	.04174	.86984	-.00181	-.09594	.22762	.31465	.02513
#2	.01333	.21144	.03856	.86491	.00140	-.08823	.22820	.31724	.02124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units									
Avg	3490.7	58062.	5536.5						
Stddev	2.0	57.	45.0						
%RSD	.05745	.09796	.81306						
#1	3489.3	58102.	5568.3						
#2	3492.1	58022.	5504.6						

Sample Name: 280-69749-B-12-B Acquired: 5/28/2015 22:41:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00132	189.00	.03236	.00123	2.1095	.01219	-.00505	53.179	.00302
Stddev	.00018	.12	.00051	.00040	.0014	.00009	.00141	.051	.00014
%RSD	13.557	.06118	1.5715	32.287	.06730	.75218	27.978	.09683	4.7065
#1	-.00120	188.91	.03272	.00151	2.1085	.01213	-.00405	53.143	.00291
#2	-.00145	189.08	.03200	.00095	2.1105	.01226	-.00605	53.215	.00312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10317	W .22896	.44944	246.73	24.421	.16701	39.582	3.5216	-.00012
Stddev	.00005	.00059	.00001	.45	.045	.00126	.034	.0071	.00019
%RSD	.04808	.25739	.00123	.18299	.18276	.75363	.08667	.20193	158.65
#1	.10320	.22854	.44944	247.05	24.390	.16790	39.607	3.5267	.00001
#2	.10313	.22937	.44943	246.42	24.453	.16612	39.558	3.5166	-.00026
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.784	.19867	W 2.4695	.17766	.56679	F -.02055	.01216	4.2580	9.1122
Stddev	.484	.00060	.0155	.00304	.01196	.00405	.00058	.0152	.0325
%RSD	4.1062	.30428	.62854	1.7127	2.1096	19.708	4.7746	.35626	.35626
#1	12.126	.19824	2.4585	.17981	.55834	-.02341	.01257	4.2473	9.0892
#2	11.442	.19910	2.4804	.17551	.57525	-.01769	.01175	4.2687	9.1351
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000			50.000			
Low Limit			-1.0000			-.02000			
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01848	.80871	.09092	.81503	.00069	F -.15676	.31260	.79921	.02457
Stddev	.00139	.00015	.00364	.00221	.00188	.03129	.00250	.00910	.00074
%RSD	7.5370	.01813	4.0075	.27059	271.99	19.957	.79916	1.1387	3.0311
#1	.01947	.80861	.08834	.81658	-.00064	-.13464	.31083	.79277	.02510
#2	.01750	.80882	.09350	.81347	.00202	-.17888	.31436	.80564	.02405
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass				
High Limit						50.000			
Low Limit						-.10000			
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3713.1	60420.	5940.2						
Stddev	2.9	56.	13.8						
%RSD	.07916	.09261	.23195						
#1	3711.0	60381.	5930.5						
#2	3715.1	60460.	5949.9						

Sample Name: 280-69774-A-2-E Acquired: 5/28/2015 22:44:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm 131.80	As1890 ppm .02031	B_2089 ppm .00207	Ba4554 ppm .90356	Be3130 ppm .01130	Bi2230 ppm -.00731	Ca3179 ppm 57.486	Cd2288 ppm .00127
#1	-.00184	131.07	.02204	.00141	.90369	.01127	-.00387	57.425	.00117
#2	-.00128	132.52	.01858	.00272	.90343	.01134	-.01075	57.546	.00137
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .15332	Cu3247 ppm .32721	Fe2714 ppm 144.07	K_7664 ppm 11.605	Li6707 ppm .07532	Mg2790 ppm 17.531	Mn2576 ppm 1.3807	Mo2020 ppm -.00010
#1	.05430	.15336	.32961	143.31	11.568	.07568	17.572	1.3815	-.00050
#2	.05391	.15329	.32481	144.84	11.642	.07495	17.490	1.3798	.00030
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .08613	P_1782 ppm 1.2397	Pb2203 ppm .13834	S_1820 ppm .21721	Sb2068 ppm -.00979	Se1960 ppm .00744	Si2881 ppm 4.0705	SiO2 ppm 8.7108
#1	4.8548	.08604	1.2408	.13792	.21380	-.00662	.00640	4.0639	8.6967
#2	4.8369	.08622	1.2386	.13876	.22061	-.01296	.00848	4.0771	8.7250
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .28393	Th2837 ppm .07998	Ti3349 ppm .26153	Tl1908 ppm -.00428	U_3701 ppm F -.13816	V_2924 ppm .21173	Zn2062 ppm .78443	Zr3391 ppm .01747
#1	.01607	.28378	.08055	.26350	-.00444	-.14253	.21347	.79104	.01675
#2	.01617	.28407	.07942	.25956	-.00411	-.13380	.20999	.77782	.01819
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 59524.	Y_3774 Cts/S 5816.1	377.433 {89}					
#1	3610.8	59505.	5830.8						
#2	3618.0	59543.	5801.4						

Sample Name: 280-69774-A-8-C Acquired: 5/28/2015 22:46:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	76.256	.01377	.00640	1.0710	.00308	-.00333	129.25	.00086
Stddev	.00006	.558	.00340	.00028	.0071	.00003	.00059	.92	.00031
%RSD	9.0660	.73213	24.714	4.4400	.66315	.89054	17.793	.71515	36.031
#1	-.00075	76.650	.01137	.00620	1.0760	.00306	-.00291	129.90	.00108
#2	-.00066	75.861	.01618	.00660	1.0660	.00310	-.00375	128.60	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04442	W 15779	.08420	84.404	14.345	.05251	24.063	2.6900	-.00147
Stddev	.00043	.00149	.00158	.452	.086	.00087	.090	.0074	.00023
%RSD	.96089	.94672	1.8757	.53537	.60062	1.6491	.37223	.27386	15.455
#1	.04472	.15885	.08308	84.724	14.406	.05312	23.999	2.6848	-.00163
#2	.04411	.15673	.08532	84.085	14.284	.05190	24.126	2.6952	-.00131
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.01000								
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.6803	.09605	W 2.1966	.05919	3.9345	-.00396	.00797	3.3942	7.2635
Stddev	.0249	.00028	.0123	.00052	.0367	.00370	.00199	.0284	.0607
%RSD	.92870	.29498	.55934	.87228	.93386	93.223	25.014	.83565	.83565
#1	2.6980	.09625	2.2053	.05883	3.9605	-.00658	.00656	3.4142	7.3065
#2	2.6627	.09585	2.1879	.05956	3.9085	-.00135	.00938	3.3741	7.2206
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-1.0000								
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01424	.39909	.02947	.81321	-.00908	W -.06526	.17766	.21970	.02409
Stddev	.00081	.00213	.00130	.00458	.00306	.01459	.00230	.00165	.00072
%RSD	5.7006	.53476	4.4110	.56302	33.681	22.351	1.2920	.74878	2.9858
#1	.01366	.40060	.02855	.80997	-.01124	-.05495	.17604	.21853	.02460
#2	.01481	.39758	.03039	.81644	-.00692	-.07558	.17929	.22086	.02358
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass				
High Limit	45.000								
Low Limit	-.05000								
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3360.5	55673.	5550.8						
Stddev	8.8	115.	67.6						
%RSD	.26300	.20583	1.2176						
#1	3366.7	55754.	5503.0						
#2	3354.2	55592.	5598.6						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 22:49:14 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0546	48.268	-0.00261	-0.00081	.00028	.00024	1.0082	.03116	-.00015	-.00089	.00073	.00243	47.610
Stddev	.00027	.042	.00209	.00030	.00022	.00015	.0064	.00497	.00017	.00043	.00055	.00064	.330
%RSD	5.0303	.08769	80.107	37.415	79.516	62.309	.63457	15.957	113.11	48.539	75.290	26.543	.69387
#1	-.00527	48.238	-.00113	-.00102	.00012	.00014	1.0037	.03467	-.00003	-.00059	.00034	.00289	47.376
#2	-.00566	48.298	-.00409	-.00059	.00043	.00035	1.0127	.02764	-.00026	-.00120	.00111	.00197	47.844

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06445	.00169	.04178	-.00140	-.00034	255.85	.00210	.00217	.00114	4.9565	-.00939	.00632	-.01259
Stddev	.03173	.00047	.00653	.00004	.00036	.96	.00064	.00210	.00081	.0256	.00217	.00310	.01591
%RSD	49.234	27.826	15.623	2.7129	106.08	.37593	30.546	96.768	71.165	.51611	23.130	49.131	126.38
#1	.08689	.00136	.04639	-.00137	-.00060	255.17	.00256	.00069	.00056	4.9384	-.00785	.00412	-.02384
#2	.04201	.00203	.03716	-.00143	-.00009	256.53	.00165	.00366	.00171	4.9746	-.01092	.00851	-.00134

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	-.02694	-.00151	.00040	5.0019	-.01361	.00107	10.394	.00292	-.00016	-.12902			
Stddev	.03405	.00003	.00005	.0207	.00031	.00045	.009	.00010	.00086	.00018			
%RSD	126.38	1.7335	12.004	.41415	2.2579	41.567	.08839	3.4643	531.06	.13967			
#1	-.05102	-.00153	.00037	4.9872	-.01383	.00076	10.401	.00299	-.00077	-.12889			
#2	-.00286	-.00149	.00044	5.0165	-.01339	.00139	10.388	.00285	.00045	-.12914			

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3242.4	53614.	5233.5										
Stddev	1.4	95.	32.4										
%RSD	.04249	.17772	.61869										
#1	3243.4	53546.	5210.6										
#2	3241.4	53681.	5256.4										

Sample Name: CCV-3290307 Acquired: 5/28/2015 22:51:51 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49009	Al1670 ppm .51461	As1890 ppm .98142	B_2089 ppm .49639	Ba4554 ppm .48645	Be3130 ppm .46715	Bi2230 ppm -.00281	Ca3179 ppm 4.7641	Cd2288 ppm .49824	Co2286 ppm .49721	Cr2055 ppm .50466	Cu3247 ppm .49045	Fe2599 ppm 2.2982	
#1	.48916	.51387	.97386	.49646	.48311	.46386	-.00359	4.7793	.49857	.49565	.50320	.48962	2.2952	
#2	.49103	.51535	.98899	.49632	.48979	.47044	-.00203	4.7489	.49790	.49878	.50612	.49128	2.3012	
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass						
Elem Units Avg Stddev %RSD	K_7664 ppm 50.883	Li6707 ppm 1.0061	Mg2790 ppm 19.666	Mn2576 ppm .50018	Mo2020 ppm .48683	Na5895 ppm 5.0484	Ni2316 ppm .49553	P_1782 ppm .99021	Pb2203 ppm .99953	S_1820 ppm .00303	Sb2068 ppm .98170	Se1960 ppm .97889	Si2881 ppm 4.7284	
#1	50.470	1.0012	19.648	.49915	.48600	5.0316	.49395	.98783	.99872	.00424	.97726	.97963	4.7172	
#2	51.297	1.0109	19.684	.50121	.48766	5.0652	.49711	.99260	1.0003	.00181	.98614	.97815	4.7397	
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Units Avg Stddev %RSD	SiO2 ppm 10.119	Sn1899 ppm .98625	Sr4077 ppm .48495	Th2837 ppm -.00350	Ti3349 ppm .48940	TI1908 ppm 1.0119	U_3701 ppm -.04046	V_2924 ppm .49729	Zn2062 ppm .49780	Zr3391 ppm .47500				
#1	10.095	.98156	.48214	-.00240	.48865	1.0113	-.04263	.49501	.49560	.47375				
#2	10.143	.99094	.48775	-.00461	.49014	1.0124	-.03828	.49956	.49999	.47625				
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass						
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3349.6	Y_3600 Cts/S 56356.	Y_3774 Cts/S 5379.1											
#1	3349.4	56470.	5401.3											
#2	3349.7	56242.	5357.0											

Sample Name: CCB Acquired: 5/28/2015 22:54:19 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00008	Al1670 ppm .00391	As1890 ppm -.00289	B_2089 ppm -.00082	Ba4554 ppm -.00006	Be3130 ppm .00004	Bi2230 ppm -.00385	Ca3179 ppm .00457	Cd2288 ppm .00003	Co2286 ppm -.00016	Cr2055 ppm -.00001	Cu3247 ppm -.00030	Fe2599 ppm .00602
#1	.00019	.00474	-.00121	-.00090	-.00020	-.00001	-.00624	.00391	.00008	-.00043	-.00014	-.00035	.00684
#2	-.00034	.00307	-.00457	-.00074	.00007	.00009	-.00146	.00524	-.00003	.00011	.00011	-.00025	.00519
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .10280	Li6707 ppm .00201	Mg2790 ppm .00176	Mn2576 ppm .00008	Mo2020 ppm -.00001	Na5895 ppm .05570	Ni2316 ppm .00003	P_1782 ppm -.00474	Pb2203 ppm -.00136	S_1820 ppm .00045	Sb2068 ppm .00128	Se1960 ppm .00401	Si2881 ppm .03835
#1	.11172	.00049	-.00339	.00006	.00018	.05456	.00034	-.00558	-.00224	-.00152	.00112	-.00115	.04547
#2	.09388	.00353	.00691	.00010	-.00019	.05684	-.00028	-.00390	-.00048	.00242	.00145	.00918	.03123
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .08206	Sn1899 ppm -.00067	Sr4077 ppm .00006	Th2837 ppm .00055	Ti3349 ppm -.00003	TI1908 ppm .00098	U_3701 ppm -.03709	V_2924 ppm -.00071	Zn2062 ppm -.00011	Zr3391 ppm .00108			
#1	.09730	-.00201	.00000	.00043	.00030	.00136	-.03284	-.00102	.00015	.00142			
#2	.06683	.00066	.00012	.00067	-.00035	.00060	-.04135	-.00040	-.00037	.00074			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3332.0	Y_3600 Cts/S 56942.	Y_3774 Cts/S 5372.0										
#1	3339.9	56822.	5394.2										
#2	3324.2	57062.	5349.9										

Sample Name: CCVL3296658 Acquired: 5/28/2015 22:56:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00993	Al1670 ppm .10919	As1890 ppm .01431	B_2089 ppm .10172	Ba4554 ppm .00983	Be3130 ppm .00094	Bi2230 ppm .10681	Ca3179 ppm .19286	Cd2288 ppm .00496	Co2286 ppm .01039	Cr2055 ppm .01040	Cu3247 ppm .01593	Fe2599 ppm .09580
#1	.01039	.10959	.01375	.10144	.00976	.00089	.10757	.19144	.00502	.01024	.01041	.01605	.09402
#2	.00947	.10878	.01487	.10200	.00990	.00099	.10605	.19429	.00490	.01053	.01039	.01582	.09758
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem Units Avg Stddev %RSD	K_7664 ppm 3.2279	Li6707 ppm .01207	Mg2790 ppm .21935	Mn2576 ppm .01054	Mo2020 ppm .01938	Na5895 ppm 1.0783	Ni2316 ppm .04172	P_1782 ppm 2.9508	Pb2203 ppm .00869	S_1820 ppm -.00217	Sb2068 ppm .00879	Se1960 ppm .01306	Si2881 ppm .49684
#1	3.1888	.01218	.21987	.01044	.01939	1.0699	.04230	2.9534	.00900	-.00068	.00850	.01065	.47887
#2	3.2669	.01196	.21883	.01063	.01937	1.0866	.04114	2.9482	.00838	-.00367	.00907	.01546	.51481
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass

Elem Units Avg Stddev %RSD	SiO2 ppm 1.0632	Sn1899 ppm .10282	Sr4077 ppm .00999	Th2837 ppm .01527	Ti3349 ppm .01015	TI1908 ppm .01843	U_3701 ppm .05774	V_2924 ppm .00946	Zn2062 ppm .02150	Zr3391 ppm .01317			
#1	1.0248	.10252	.00984	.01647	.01010	.01772	.01341	.00957	.02193	.01392			
#2	1.1017	.10312	.01014	.01407	.01020	.01913	.10208	.00935	.02107	.01243			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass			

Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3404.6	Y_3600 Cts/S 58524.	Y_3774 Cts/S 5516.9										
#1	3406.7	58789.	5524.5										
#2	3402.4	58259.	5509.4										

Sample Name: 280-69741-A-1-E Acquired: 5/28/2015 22:59:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 .67457	Be3130 .00090	Bi2230 -.02046	Ca3179 86.188	Cd2288 .00152
#1	-.00703	72.964	.01228	.03798	.67316	.00085	-.01988	86.116	.00168
#2	-.00728	72.631	.01542	.04029	.67598	.00096	-.02105	86.261	.00135
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.06772	.55946	.12734	119.11	7.6573	.08924	49.441	1.8920	.00425
#2	.06791	.56024	.12514	118.71	7.7281	.08795	49.290	1.8919	.00455
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	3.6070	.47360	2.0471	.18141	2.4745	-.00915	.00834	3.1844	6.8145
#2	3.5827	.47233	2.0479	.18067	2.4673	-.00520	.00580	3.2150	6.8801
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.22225	.37668	.02710	17.367	-.00282	-.13569	.85887	.30355	1.0271
#2	.22001	.37738	.02620	17.395	-.00222	-.12908	.86281	.30504	1.0395
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	377.433 {89}					
#1	3383.6	56581.	5539.2						
#2	3375.7	56679.	5577.6						

Sample Name: 280-69741-A-1-Esd@5 Acquired: 5/28/2015 23:01:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 189.042 {478}	B_2089 ppm	Ba4554 .13765	Be3130 .00026	Bi2230 -.00630	Ca3179 17.717	Cd2288 .00030
#1	-.00126	14.800	.00561	.00769	.13776	.00033	-.00740	17.695	.00011
#2	-.00133	14.962	-.00051	.00700	.13754	.00019	-.00520	17.739	.00049
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 324.754 {104}	Fe2599 ppm	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.01480	.11572	.02610	23.120	1.5730	.01980	10.335	.39762	.00031
#2	.01458	.11501	.02575	23.216	1.6242	.02043	10.364	.39893	.00083
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm	P_1782 178.284 {489}	Pb2203 ppm	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.74806	.10236	.41241	.03936	.49849	.00097	.00617	.65798	1.4081
#2	.75259	.10339	.41872	.03942	.49804	-.00380	.00083	.68084	1.4570
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 283.730 {119}	Ti3349 ppm	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.04633	.07884	.00780	3.5595	-.00411	-.07702	.18101	.06419	.21026
#2	.05047	.07914	.00700	3.5772	.00082	-.04460	.18312	.06497	.21252
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	377.433 {89}					
#1	3311.4	56335.	5502.5						
#2	3298.4	55941.	5466.2						

Sample Name: 280-69741-A-1-F MS Acquired: 5/28/2015 23:04:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03407	118.36	.87449	.89171	2.8361	.04375	F 1.7790	151.33	.09413
Stddev	.00063	.66	.00561	.00384	.0022	.00035	.0018	.23	.00055
%RSD	1.8566	.55605	.64114	.43101	.07750	.80119	.09899	.15319	.58251
#1	.03451	117.89	.87845	.88899	2.8345	.04350	1.7777	151.17	.09374
#2	.03362	118.82	.87052	.89443	2.8376	.04400	1.7802	151.50	.09451
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50507	W .79182	.39078	140.85	59.837	1.0575	105.59	2.7365	.87929
Stddev	.00297	.00004	.00089	.73	.093	.0018	.16	.0017	.00399
%RSD	.58858	.00515	.22729	.52073	.15533	.16879	.15060	.06126	.45401
#1	.50297	.79179	.39015	140.33	59.771	1.0563	105.48	2.7353	.87647
#2	.50718	.79185	.39141	141.37	59.903	1.0588	105.70	2.7377	.88212
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.633	.94871	W 11.508	.66273	4.6713	.26505	1.7582	5.7597	12.326
Stddev	.217	.00170	.058	.00361	.0091	.00696	.0064	.0206	.044
%RSD	.39015	.17941	.50023	.54505	.19533	2.6253	.36561	.35702	.35702
#1	55.480	.94991	11.467	.66018	4.6648	.26013	1.7536	5.7452	12.295
#2	55.787	.94751	11.549	.66529	4.6777	.26997	1.7627	5.7742	12.357
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-.1.0000						
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9800	1.4268	.95611	F 25.646	1.6920	1.7554	1.5106	.80777	1.6318
Stddev	.0078	.0026	.00107	.210	.0072	.0349	.0029	.01356	.0053
%RSD	.39613	.18521	.11241	.81823	.42228	1.9906	.19235	1.6781	.32543
#1	1.9744	1.4249	.95535	25.795	1.6870	1.7801	1.5126	.79819	1.6280
#2	1.9855	1.4287	.95687	25.498	1.6971	1.7307	1.5085	.81736	1.6355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			25.000						
Low Limit			-.02000						
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units									
Avg	3252.2	53886.	5389.9						
Stddev	2.9	74.	14.4						
%RSD	.08996	.13660	.26649						
#1	3250.1	53938.	5400.1						
#2	3254.2	53834.	5379.8						

Sample Name: 280-69741-A-1-G MSD Acquired: 5/28/2015 23:06:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .03594	As1890 ppm 110.28	B_2089 ppm .88922	Ba4554 ppm 2.7763	Be3130 ppm .04435	Bi2230 ppm F 1.8287	Ca3179 ppm 145.15	Cd2288 ppm .09652
#1	.03627	110.12	.89462	.92053	2.7748	.04446	1.8273	145.21	.09639
#2	.03560	110.44	.88382	.91847	2.7778	.04423	1.8302	145.08	.09665
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .51046	Cu3247 ppm W 81179	Fe2714 ppm .37811	K_7664 ppm 130.79	Li6707 ppm 59.957	Mg2790 ppm 1.0651	Mn2576 ppm 102.13	Mo2020 ppm 2.5814
#1	.51003	.80949	.37631	130.61	59.995	1.0642	101.86	2.5692	.89593
#2	.51088	.81409	.37991	130.98	59.918	1.0660	102.39	2.5935	.89763
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 56.053	P_1782 ppm 95425	Pb2203 ppm W 11.490	S_1820 ppm .63950	Sb2068 ppm 4.5534	Se1960 ppm 28648	Si2881 ppm 1.8073	SiO2 ppm 5.6412
#1	55.729	.95245	11.482	.64046	4.5478	.28395	1.8006	5.6228	12.033
#2	56.377	.95605	11.497	.63854	4.5591	.28901	1.8139	5.6595	12.111
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0020	Th2837 ppm 1.4243	Ti3349 ppm .97406	Tl1908 ppm W 24.574	U_3701 ppm 1.7365	V_2924 ppm 1.7902	Zn2062 ppm 1.4540	Zr3391 ppm .78414
#1	2.0026	1.4234	.96938	24.581	1.7441	1.7891	1.4459	.78170	1.5750
#2	2.0014	1.4252	.97875	24.568	1.7289	1.7913	1.4620	.78658	1.5898
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3287.0	Y_3774 Cts/S 54984.	377.433 {89}				Zn2062 ppm 1.4540	Zr3391 ppm .78414
#1	3277.4	55221.	5547.7						
#2	3296.6	54747.	5557.4						

Sample Name: 280-69743-A-1-C Acquired: 5/28/2015 23:09:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm 58.277	As1890 ppm .02437	B_2089 ppm .02605	Ba4554 ppm .35034	Be3130 ppm .00109	Bi2230 ppm -.01008	Ca3179 ppm 21.326	Cd2288 ppm .00119
#1	-.00002	58.957	.02093	.02541	.35712	.00108	-.01054	21.673	.00158
#2	-.00039	57.598	.02781	.02668	.34357	.00111	-.00963	20.979	.00080
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .26140	Cu3247 ppm .07010	Fe2714 ppm 98.428	K_7664 ppm 5.3977	Li6707 ppm .06884	Mg2790 ppm 37.901	Mn2576 ppm 1.4457	Mo2020 ppm .00017
#1	.05339	.25930	.07075	99.580	5.4650	.06924	37.898	1.4487	.00007
#2	.05439	.26351	.06945	97.276	5.3303	.06844	37.905	1.4426	.00026
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 8.0326	P_1782 ppm .34592	Pb2203 ppm 1.9780	S_1820 ppm .03105	Sb2068 ppm .80642	Se1960 ppm -.00672	Si2881 ppm .00768	SiO2 ppm 2.1841
#1	8.1572	.34348	1.9594	.03172	.80222	-.00703	.01133	2.2009	4.7100
#2	7.9081	.34837	1.9966	.03038	.81061	-.00641	.00402	2.1673	4.6380
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .01651	Th2837 ppm .15433	Ti3349 ppm .02658	Tl1908 ppm 3.9866	U_3701 ppm -.00003	V_2924 ppm W -.06982	Zn2062 ppm .25060	Zr3391 ppm .19328
#1	.01727	.15681	.02657	3.9928	.00011	-.06659	.25386	.19447	.03828
#2	.01574	.15186	.02659	3.9805	-.00017	-.07305	.24734	.19208	.03966
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3404.5	Y_3774 Cts/S 57110.	377.433 {89}					
#1	3399.0	57008.	5628.3						
#2	3410.0	57211.	91.2						
			143.						
			1.6212						

Sample Name: 280-69745-B-1-A Acquired: 5/28/2015 23:12:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279209 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00469	As1890 ppm 67.608	B_2089 ppm .01308	Ba4554 ppm .02273	Be3130 ppm .75230	Bi2230 ppm .00066	Ca3179 ppm -.02846	Cd2288 ppm 25.157
#1	-.00469	67.512	.01509	.02384	.75335	.00063	-.02867	25.181	.00244
#2	-.00469	67.704	.01107	.02162	.75126	.00069	-.02825	25.133	.00260
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .02690	Cu3247 ppm W .49329	Fe2714 ppm .21560	K_7664 ppm 106.12	Li6707 ppm 11.493	Mg2790 ppm .05987	Mn2576 ppm 17.717	Mo2020 ppm 1.9260
#1	.02668	.49542	.21757	106.01	11.487	.06132	17.764	1.9295	.00382
#2	.02712	.49115	.21362	106.24	11.499	.05843	17.670	1.9224	.00347
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 { 57}	Ni2316 ppm 1.5289	P_1782 ppm .26249	Pb2203 ppm W 3.5284	S_1820 ppm 1.5115	Sb2068 ppm 3.1503	Se1960 ppm .00470	Si2881 ppm .00706	SiO2 ppm 3.2816
#1	1.5143	.26199	3.5233	1.5095	3.1564	.00544	.00726	3.2798	7.0187
#2	1.5435	.26299	3.5334	1.5135	3.1442	.00396	.00685	3.2834	7.0264
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .48214	Th2837 ppm .18316	Ti3349 ppm .10281	Tl1908 ppm F 33.441	U_3701 ppm .00778	V_2924 ppm F -.15892	Zn2062 ppm 1.1325	Zr3391 ppm 1.0882
#1	.48248	.18294	.10514	33.440	.00890	-.16527	1.1361	1.0919	.66733
#2	.48180	.18337	.10048	33.442	.00666	-.15258	1.1289	1.0846	.66591
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail 25.000 -.02000	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3469.5	Y_3774 Cts/S 58714.	377.433 { 89}					
#1	3486.9	58488.	5702.0						
#2	3452.0	58939.	5711.8						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 23:14:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00584	47.890	-.00161	.00090	.00068	-.00001	1.0086	.02888	-.00032	-.00085	.00022	.00232	47.124
Stddev	.00042	.174	.00335	.00066	.00013	.00003	.0096	.00260	.00000	.00039	.00052	.00062	.041
%RSD	7.1295	.36376	207.59	73.637	18.840	443.86	.95346	8.9872	.42907	45.479	229.99	26.911	.08701
#1	-.00554	48.013	.00075	.00043	.00077	-.00003	1.0018	.02704	-.00032	-.00112	-.00014	.00276	47.095
#2	-.00613	47.767	-.00398	.00136	.00059	.00002	1.0154	.03071	-.00032	-.00057	.00059	.00188	47.153
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.07814	.00351	.04552	-.00129	-.00099	252.98	.00230	.00202	-.00127	4.9677	-.01266	.00729	.00036
Stddev	.05010	.00151	.00623	.00003	.00055	1.04	.00011	.00124	.00094	.0337	.00404	.00217	.00377
%RSD	64.123	42.988	13.692	2.1743	56.143	.41070	4.8479	61.214	73.865	.67749	31.910	29.767	1046.1
#1	.04271	.00245	.04111	-.00127	-.00138	253.71	.00223	.00115	-.00194	4.9439	-.00980	.00576	-.00231
#2	.11357	.00458	.04993	-.00131	-.00059	252.24	.00238	.00289	-.00061	4.9915	-.01552	.00883	.00303
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.00077	-.00220	.00031	4.9967	-.00780	.00458	10.474	.00306	.00015	-.12968			
Stddev	.00807	.00119	.00012	.0070	.00089	.00225	.037	.00034	.00009	.00246			
%RSD	1046.1	53.988	38.228	.13998	11.358	49.033	.35779	11.201	58.870	1.8952			
#1	-.00494	-.00303	.00022	5.0017	-.00843	.00299	10.501	.00330	.00021	-.12795			
#2	.00648	-.00136	.00039	4.9918	-.00718	.00617	10.448	.00281	.00009	-.13142			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3214.2	54148.	5401.9										
Stddev	9.6	29.	21.8										
%RSD	.29991	.05268	.40336										
#1	3221.0	54128.	5386.5										
#2	3207.4	54169.	5417.4										

Sample Name: CCV-3290307 Acquired: 5/28/2015 23:17:14 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49224	.51903	.98804	.50022	.47597	.45837	-.00264	4.7183	.50072	.50548	.50086	.49209	2.2806
Stddev	.00068	.00250	.00467	.00222	.00647	.00478	.00138	.0606	.00030	.00741	.00476	.00109	.0257
%RSD	.13744	.48082	.47283	.44398	1.3587	1.0432	52.095	1.2847	.06006	1.4651	.95067	.22251	1.1291
#1	.49176	.52079	.99134	.50179	.48054	.46176	-.00362	4.7612	.50094	.51072	.50423	.49286	2.2988
#2	.49272	.51726	.98474	.49865	.47140	.45499	-.00167	4.6755	.50051	.50025	.49749	.49131	2.2624

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	50.218	.99271	19.867	.50645	.49465	4.9618	.50485	1.0036	1.0186	.00172	.99661	.99927	4.7357
Stddev	.449	.00975	.093	.00045	.00868	.0618	.00727	.0113	.0187	.00286	.01468	.01387	.0013
%RSD	.89429	.98208	.46974	.08943	1.7543	1.2460	1.4402	1.1207	1.8395	165.84	1.4732	1.3877	.02718
#1	50.535	.99961	19.933	.50613	.50078	5.0055	.50999	1.0116	1.0319	-.00030	1.0070	1.0091	4.7348
#2	49.900	.98582	19.801	.50677	.48851	4.9181	.49970	.99565	1.0054	.00374	.98622	.98947	4.7366

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.134	1.0020	.47480	-.00443	.49557	1.0324	-.03135	.50158	.52046	.47213
Stddev	.003	.0156	.00516	.00127	.00113	.0116	.00676	.00530	.00111	.00182
%RSD	.02718	1.5595	1.0871	28.676	.22837	1.1193	21.566	1.0567	.21367	.38638
#1	10.132	1.0131	.47845	-.00532	.49477	1.0405	-.03613	.50533	.52125	.47342
#2	10.136	.99096	.47115	-.00353	.49637	1.0242	-.02657	.49783	.51968	.47084

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3260.3	54462.	5253.7								
Stddev	20.4	100.	53.6								
%RSD	.62484	.18354	1.0210								
#1	3245.9	54391.	5215.8								
#2	3274.7	54533.	5291.7								

Sample Name: CCB Acquired: 5/28/2015 23:19:43 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00080	.00113	-.00375	.00016	-.00033	-.00005	-.00203	.00004	.00021	-.00014	.00019	.00017	-.00121
Stddev	.00012	.00015	.00395	.00046	.00003	.00007	.00024	.00250	.00002	.00022	.00010	.00009	.00133
%RSD	15.178	13.154	105.41	284.30	8.0165	144.06	11.861	6241.7	8.5513	156.76	52.832	50.019	109.88

#1	.00089	.00123	-.00095	.00049	-.00031	.00000	-.00220	.00181	.00022	.00002	.00012	.00023	-.00027
#2	.00072	.00102	-.00654	-.00016	-.00035	-.00010	-.00186	-.00173	.00019	-.00030	.00025	.00011	-.00216

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.03964	.00101	.00220	.00015	.00030	.03387	.00041	-.00027	-.00100	-.00118	.00282	.00481	.01542
Stddev	.05327	.00065	.00457	.00012	.00009	.01113	.00022	.00050	.00126	.00395	.00266	.00338	.00337
%RSD	134.39	64.545	207.39	79.285	31.725	32.866	52.672	184.60	125.63	336.14	94.388	70.225	21.825
#1	.00197	.00055	-.00103	.00007	.00023	.04174	.00057	.00008	-.00011	-.00397	.00094	.00242	.01780
#2	.07731	.00147	.00544	.00023	.00036	.02600	.00026	-.00063	-.00189	.00162	.00470	.00720	.01304

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.03300	.00019	.00017	-.00043	.00138	.00225	-.01040	-.00011	.00004	.00094			
Stddev	.00720	.00156	.00007	.00176	.00120	.00117	.01473	.00047	.00060	.00028			
%RSD	21.825	804.13	37.240	405.08	87.445	52.079	141.58	437.74	1335.9	29.832			
#1	.03810	-.00091	.00022	.00081	.00053	.00308	.00001	-.00044	-.00038	.00114			
#2	.02791	.00130	.00013	-.00168	.00223	.00142	-.02082	.00023	.00047	.00074			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3280.6	55711.	5184.5										
Stddev	3.2	190.	97.6										
%RSD	.09731	.34051	1.8833										
#1	3278.3	55577.	5253.5										
#2	3282.8	55845.	5115.5										

Sample Name: CCVL3296658 Acquired: 5/28/2015 23:22:05 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.01047	.10907	.01319	.10318	.00968	.00090	.10823	.19485	.00516	.01049	.01036	.01532	.09031	3.1381
Stddev	.00062	.00094	.00495	.00000	.00007	.00013	.00079	.00007	.00007	.00027	.00005	.00014	.00288	.0122
%RSD	5.8913	.86619	37.571	.00095	.76353	14.852	.72664	.03722	1.2675	2.5870	.48561	.89302	3.1898	.38774
#1	.01003	.10974	.01669	.10318	.00973	.00099	.10879	.19490	.00511	.01068	.01033	.01542	.09235	3.1467
#2	.01090	.10840	.00968	.10318	.00962	.00080	.10768	.19480	.00520	.01030	.01040	.01523	.08828	3.1295

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.01173	.21548	.01066	.01967	1.0385	.04187	2.9826	.00889	.00262	.00785	.01746	.48239	1.0323	.10327
Stddev	.00125	.00445	.00013	.00004	.0079	.00022	.0000	.00157	.00294	.00308	.00020	.00729	.0156	.00124
%RSD	10.660	2.0656	1.2124	.20938	.76098	.53373	.00016	17.708	112.48	39.297	1.1529	1.5105	1.5105	1.1986
#1	.01261	.21233	.01057	.01969	1.0329	.04171	2.9826	.01001	.00054	.01003	.01760	.48754	1.0433	.10415
#2	.01084	.21863	.01075	.01964	1.0441	.04203	2.9826	.00778	.00470	.00567	.01732	.47724	1.0213	.10240

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00978	.01581	.01033	.01849	.04777	.00951	.02247	.01463
Stddev	.00015	.00023	.00055	.00118	.01711	.00006	.00049	.00264
%RSD	1.5829	1.4586	5.3010	6.3773	35.820	.68135	2.1803	18.059
#1	.00967	.01597	.00995	.01932	.03567	.00956	.02281	.01276
#2	.00989	.01565	.01072	.01765	.05987	.00946	.02212	.01650

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3366.5	57360.	5442.1
Stddev	9.8	182.	51.6
%RSD	.29100	.31788	.94807
#1	3373.5	57489.	5478.5
#2	3359.6	57231.	5405.6

Sample Name: MB 280-278830/1-A Acquired: 5/28/2015 23:24:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .10000 -.10000	Chk Pass
ELEM	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Line	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Units	.00045	.00030	.00071	W .05354	.05239	.00219	.06065	.00066	.00027
Avg	.00031	.00044	.00007	.00174	.03756	.00275	.00389	.00005	.00023
StdDev	68.850	145.94	9.9293	3.2497	71.685	125.77	6.4166	6.9953	84.206
%RSD	#1	-.00068	.00062	.00076	.05477	.07895	.00024	.05790	.00069
	#2	-.00023	-.00001	.00066	.05231	.02584	.00413	.06340	.00063
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn .05000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
ELEM	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Line	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Units	.11525	.00033	.01361	-.00039	.00679	.00035	.00268	.03736	.07995
Avg	.01160	.00010	.00105	.00126	.00294	.00004	.00348	.00414	.00887
StdDev	10.066	28.977	7.6819	324.22	43.249	11.209	129.89	11.088	11.088
%RSD	#1	.12346	.00026	.01287	-.00128	.00472	.00037	.00022	.04029
	#2	.10705	.00040	.01435	.00050	.00887	.00032	.00513	.03443
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
ELEM	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Line	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Units	.01050	.00049	-.00048	.00088	-.00070	-.01551	-.00016	.00487	.00149
Avg	.00002	.00004	.00230	.00017	.00008	.03036	.00051	.00027	.00017
StdDev	.17768	8.4440	482.51	19.487	11.684	195.81	312.18	5.5598	11.630
%RSD	#1	.01051	.00052	.00115	.00075	-.00065	-.03698	-.00052	.00506
	#2	.01048	.00046	-.00211	.00100	-.00076	.00596	.00020	.00468
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units	3352.0	57635.	5377.6						
Avg	.9	114.	39.2						
StdDev	.02723	.19828	.72812						
%RSD	#1	3351.4	57716.	5349.9					
	#2	3352.7	57554.	5405.3					

Sample Name: LCS 280-278830/2-A Acquired: 5/28/2015 23:27:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04588	1.9497	.96835	.95894	1.9058	.04572	1.9632	45.776	.09956
#2	.04562	1.9414	.96862	.95536	1.9314	.04689	1.9584	46.473	.09957
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48310	.19007	.24501	.92587	50.363	.99291	48.230	.49429	1.0087
#2	.48176	.19021	.24668	.94384	50.921	1.0003	48.247	.49648	1.0000
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05700 .04350	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	51.967	.48145	10.194	.49188	1.9861	.49360	1.9648	.57159	1.2232
#2	52.726	.48026	10.124	.49487	1.9707	.48888	1.9548	.58875	1.2599
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail 7.0000 1.0000	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9628	.94675	.98153	.97438	1.9570	2.0335	.49439	.49416	.44484
#2	1.9489	.95945	.98468	.97778	1.9394	2.0318	.49705	.49610	.45117
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3194.2	54136.	5287.4						
#2	3201.2	53905.	5260.8						

Sample Name: 280-69636-A-1-B Acquired: 5/28/2015 23:29:33 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00202	198.53	.05726	.01118	.36025	.00862	-.00807	96.018	.00075
Stddev	.00017	.34	.00604	.00051	.00160	.00002	.00336	.323	.00042
%RSD	8.2776	.17356	10.548	4.5983	.44299	.18020	41.646	.33588	55.922
#1	-.00214	198.28	.06153	.01155	.35912	.00863	-.00570	95.790	.00045
#2	-.00190	198.77	.05299	.01082	.36137	.00861	-.01045	96.246	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05863	.02250	.22445	182.32	7.6676	.04057	30.666	4.4633	.00412
Stddev	.00047	.00100	.00154	.12	.0425	.00042	.059	.0068	.00014
%RSD	.79579	4.4568	.68779	.06400	.55410	1.0276	.19377	.15185	3.4482
#1	.05896	.02320	.22336	182.24	7.6376	.04028	30.624	4.4585	.00402
#2	.05830	.02179	.22554	182.41	7.6977	.04087	30.708	4.4681	.00422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.616	.03072	W 3.7887	.11499	1.5403	W -.01665	.00629	2.9442	6.3005
Stddev	.218	.00017	.0165	.00026	.0129	.00266	.00404	.0288	.0617
%RSD	1.3991	.56517	.43671	.23014	.83573	15.964	64.267	.97960	.97960
#1	15.461	.03084	3.8004	.11518	1.5494	-.01853	.00343	2.9238	6.2569
#2	15.770	.03060	3.7770	.11480	1.5312	-.01477	.00915	2.9646	6.3442
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Warn 2.0000 -.01000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01468	1.0888	.08509	.40205	-.00442	W -.09993	.23306	.49301	.14477
Stddev	.00069	.0038	.00031	.00662	.00142	.00753	.00055	.00227	.00433
%RSD	4.7155	.35113	.36036	1.6461	32.112	7.5340	.23462	.46007	2.9916
#1	.01419	1.0861	.08487	.39737	-.00341	-.09460	.23345	.49141	.14171
#2	.01517	1.0915	.08530	.40673	-.00542	-.10525	.23267	.49461	.14784
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3685.8	60529.	6108.8						
Stddev	7.8	5.	.9						
%RSD	.21263	.00773	.01411						
#1	3691.3	60526.	6109.5						
#2	3680.2	60533.	6108.2						

Sample Name: 280-69636-A-1-Bsd@5 Acquired: 5/28/2015 23:32:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.00007	k 44.989	k .01074	.00308	k .08217	k .00208	k .00379	21.853	k .00020
Stddev	.00034	.190	.00051	.00156	.00007	.00005	.00098	.047	.00014
%RSD	478.46	.42162	4.7301	50.843	.08202	2.4957	25.983	.21489	71.279
#1	k -.00032	k 44.855	k .01039	.00418	k .08212	k .00212	k .00449	21.820	k .00010
#2	k .00017	k 45.123	k .01110	.00197	k .08221	k .00204	k .00309	21.886	k .00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .01387	k .00456	k .04899	k 42.310	1.7494	.00901	k 7.0110	1.0140	k .00013
Stddev	.00025	.00001	.00019	.406	.0078	.00074	.0158	.0016	.00023
%RSD	1.7829	.22146	.39063	.95994	.44403	8.1682	.22493	.16099	181.83
#1	k .01404	k .00456	k .04913	k 42.023	1.7549	.00849	k 6.9999	1.0129	k -.00004
#2	k .01370	k .00455	k .04886	k 42.597	1.7439	.00953	k 7.0222	1.0152	k .00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.2935	k .00882	.84842	k .02566	k .33531	k -.00363	k .00406	.68974	1.4760
Stddev	.0309	.00034	.00093	.00071	.00211	.00021	.00499	.01505	.0322
%RSD	.93735	3.8955	.10996	2.7734	.62888	5.7411	122.80	2.1813	2.1813
#1	3.2717	k .00858	.84908	k .02516	k .33382	k -.00348	k .00758	.67910	1.4533
#2	3.3153	k .00906	.84776	k .02617	k .33680	k -.00377	k .00053	.70038	1.4988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00347	.24634	k .04437	k .09024	k -.00321	kW -.06428	k .05215	k .11150	k .03431
Stddev	.00052	.00083	.00031	.00019	.00103	.01552	.00060	.00069	.00036
%RSD	14.865	.33735	.68931	.21479	32.158	24.138	1.1575	.61994	1.0412
#1	k .00383	.24575	k .04458	k .09010	k -.00393	k .05331	k .05258	k .11199	k .03406
#2	k .00310	.24692	k .04415	k .09037	k -.00248	k .07525	k .05172	k .11101	k .03457
Check ?	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3436.4	57467.	5562.9						
Stddev	1.5	169.	25.2						
%RSD	.04442	.29380	.45363						
#1	3435.3	57587.	5580.7						
#2	3437.5	57348.	5545.0						

Sample Name: 280-69636-A-1-C MS Acquired: 5/28/2015 23:34:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .03781	As1890 ppm 390.63	B_2089 ppm .84783	Ba4554 ppm 47636	Be3130 ppm 2.1409	Bi2230 ppm .04894	Ca3179 ppm F 1.6830	Cd2288 ppm 143.45	Cd2288 ppm .08713
#1	.03795	389.02	.84479	.47745	2.1406	.04893	1.6863	143.28	.08752	
#2	.03767	392.25	.85087	.47527	2.1411	.04896	1.6797	143.62	.08674	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .46242	Cu3247 ppm W .22185	Fe2714 ppm .49204	K_7664 ppm 271.441 {124}	Li6707 ppm 766.490 {44}	Mg2790 ppm .92476	Mn2576 ppm 91.676	Mo2020 ppm 5.7337	Mo2020 ppm .75003
#1	.46369	.22281	.49293	249.87	52.965	.92128	91.699	5.7444	.75266	
#2	.46115	.22089	.49115	251.85	53.331	.92824	91.653	5.7230	.74740	
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 62.020	P_1782 ppm .43144	Pb2203 ppm W 12.180	S_1820 ppm .52083	Sb2068 ppm 3.7925	Se1960 ppm .14621	Si2881 ppm 1.6433	SiO2 ppm 6.3078	SiO2 ppm 13.499
#1	62.004	.43280	12.225	.52092	3.7936	.15080	1.6467	6.2956	13.473	
#2	62.035	.43008	12.136	.52075	3.7915	.14162	1.6398	6.3200	13.525	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 1.5151	Th2837 ppm 1.9899	Ti3349 ppm .96553	Tl1908 ppm 1.0129	U_3701 ppm 1.5060	V_2924 ppm 1.6199	Zn2062 ppm .83742	Zr3391 ppm 1.0311	Zr3391 ppm .70046
#1	1.5218	1.9883	.96948	1.0152	1.5111	1.6432	.83778	1.0300	.70066	
#2	1.5085	1.9915	.96158	1.0105	1.5010	1.5966	.83706	1.0322	.70025	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3608.0	Y_3774 Cts/S 58888.	377.433 {89}						
#1	3615.9	58812.	6219.1							
#2	3600.0	58964.	6200.7							

Sample Name: 280-69636-A-1-D MSD Acquired: 5/28/2015 23:37:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .03830	As1890 ppm 356.03	B_2089 ppm .84838	Ba4554 ppm 2.0492	Be3130 ppm .04900	Bi2230 ppm F 1.6872	Ca3179 ppm 139.87	Cd2288 ppm .08768
#1	.03799	356.92	.85414	.47828	2.0529	.04909	1.6891	140.05	.08768
#2	.03861	355.14	.84262	.47981	2.0455	.04892	1.6854	139.69	.08768
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .45718	Cu3247 ppm W .21636	Fe2714 ppm .46923	K_7664 ppm 232.18	Li6707 ppm 53.133	Mg2790 ppm 92956	Mn2576 ppm 88.945	Mo2020 ppm 5.4485
#1	.45767	.21717	.47117	232.38	53.179	.92778	89.297	5.4616	.76540
#2	.45668	.21554	.46730	231.99	53.087	.93134	88.592	5.4354	.76181
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 61.596	P_1782 ppm .43219	Pb2203 ppm W 11.926	S_1820 ppm .51516	Sb2068 ppm 3.8508	Se1960 ppm 14982	Si2881 ppm 1.6457	SiO2 ppm 6.1728
#1	61.554	.43285	11.964	.51644	3.8635	.15316	1.6546	6.1683	13.200
#2	61.637	.43152	11.889	.51389	3.8382	.14648	1.6369	6.1772	13.219
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 1.5473	Th2837 ppm 1.9017	Ti3349 ppm .97040	Tl1908 ppm .93652	U_3701 ppm 1.5334	V_2924 ppm 1.6425	Zn2062 ppm .79594	Zr3391 ppm .98149
#1	1.5479	1.9060	.96872	.93880	1.5379	1.6425	.79790	.98613	.67471
#2	1.5467	1.8974	.97208	.93423	1.5289	1.6425	.79399	.97685	.66847
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3557.2	Y_3774 Cts/S 57715.	377.433 {89}					
#1	3555.7	57550.	6095.1						
#2	3558.7	57880.	6099.5						

Sample Name: CCVH-3283796 Acquired: 5/28/2015 23:39:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00562	48.285	-.00260	.00085	.00029	.00013	1.0111	.03674	-.00024	-.00100	.00066	.00226	47.398
Stddev	.00078	.019	.00136	.00029	.00012	.00003	.0015	.00354	.00023	.00009	.00031	.00027	.139
%RSD	13.870	.03994	52.328	33.532	42.070	26.263	.14966	9.6451	93.143	8.6727	46.793	11.864	.29303
#1	-.00617	48.271	-.00356	.00105	.00020	.00015	1.0122	.03925	-.00041	-.00094	.00087	.00207	47.300
#2	-.00507	48.298	-.00164	.00065	.00037	.00010	1.0100	.03424	-.00008	-.00106	.00044	.00245	47.496

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.13479	.00334	.05904	-.00091	-.00042	254.94	.00225	.00717	.00064	4.9796	-.00977	.01197	-.00509
Stddev	.02362	.00140	.01115	.00041	.00027	1.25	.00080	.00231	.00081	.0058	.00001	.00502	.00305
%RSD	17.521	41.930	18.891	45.291	64.456	.49003	35.342	32.248	127.01	.11557	.12585	41.964	59.957
#1	.11809	.00434	.05115	-.00120	-.00061	255.82	.00169	.00881	.00121	4.9837	-.00978	.00842	-.00293
#2	.15149	.00235	.06692	-.00062	-.00023	254.05	.00282	.00554	.00006	4.9756	-.00976	.01553	-.00725

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.01089	-.00135	.00048	5.0046	-.01331	.00149	10.308	.00314	-.00103	-.13303
Stddev	.00653	.00015	.00015	.0242	.00068	.00243	.181	.00018	.00029	.00273
%RSD	59.957	11.185	31.992	.48288	5.0717	162.60	1.7535	5.8160	28.040	2.0549
#1	-.00627	-.00145	.00059	4.9875	-.01379	-.00022	10.180	.00327	-.00082	-.13110
#2	-.01551	-.00124	.00037	5.0217	-.01284	.00321	10.436	.00301	-.00123	-.13496

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Avg	3239.1	53980.	5286.1							
Stddev	3.6	610.	30.5							
%RSD	.10981	1.1295	.57738							
#1	3241.6	53548.	5307.7							
#2	3236.6	54411.	5264.6							

Sample Name: CCV-3290307 Acquired: 5/28/2015 23:42:13 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49030	.52168	.98590	.50190	.47996	.46068	-.00260	4.7144	.50213	.50040	.49912	.49344	2.2863
Stddev	.00301	.00009	.00118	.00024	.00401	.00230	.00036	.0200	.00109	.00049	.00140	.00149	.0001
%RSD	.61461	.01785	.11954	.04803	.83470	.50010	13.986	.42448	.21768	.09692	.27969	.30162	.00480

#1	.49243	.52175	.98673	.50172	.48279	.46230	-.00234	4.7286	.50135	.50074	.50011	.49449	2.2862
#2	.48817	.52161	.98507	.50207	.47713	.45905	-.00286	4.7003	.50290	.50006	.49813	.49239	2.2863

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.492	1.0013	19.684	.50355	.48834	5.0367	.49866	.99683	1.0059	.00242	.99199	.98857	4.6873
Stddev	.463	.0051	.040	.00127	.00234	.0513	.00062	.00558	.0018	.00299	.00768	.00014	.0262
%RSD	.91670	.50944	.20075	.25243	.48002	1.0179	.12515	.55984	.18072	123.61	.77385	.01419	.55948

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.031	.99216	.47884	-.00426	.49272	1.0163	-.02792	.50227	.50365	.47225			
Stddev	.056	.00123	.00313	.00170	.00013	.0015	.03021	.00293	.00554	.00165			
%RSD	.55948	.12371	.65441	39.946	.02615	.14612	108.21	.58368	1.0997	.35005			

#1	9.9911	.99302	.48105	-.00306	.49263	1.0152	-.04928	.50020	.49974	.47342			
#2	10.070	.99129	.47662	-.00547	.49281	1.0173	-.00656	.50434	.50757	.47108			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3294.1	55702.	5334.5										
Stddev	13.4	130.	41.9										
%RSD	.40778	.23417	.78579										

#1	3303.6	55794.	5304.9										
#2	3284.6	55610.	5364.2										

Sample Name: CCB Acquired: 5/28/2015 23:44:43 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00041	.00147	-.00499	.00033	.00008	.00005	-.00129	-.00132	.00030	-.00016	.00005	-.00020	-.00004
Stddev	.00033	.00009	.00819	.00005	.00007	.00005	.00068	.00114	.00015	.00002	.00020	.00008	.00256
%RSD	80.386	6.4212	164.15	15.020	85.530	109.87	52.950	86.525	48.716	10.077	438.87	42.659	6199.7
#1	.00018	.00141	-.01079	.00037	.00003	.00001	-.00177	-.00051	.00040	-.00015	-.00009	-.00026	.00177
#2	.00064	.00154	.00080	.00030	.00013	.00008	-.00080	-.00213	.00020	-.00017	.00018	-.00014	-.00185

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.02566	.00280	.00555	.00012	-.00013	.03309	.00001	-.00184	-.00059	.00272	.00301	.00177	.02309
Stddev	.00565	.00137	.00109	.00006	.00038	.01394	.00010	.00041	.00019	.00220	.00655	.00400	.00430
%RSD	22.010	49.125	19.588	50.302	299.57	42.125	899.28	22.132	32.655	80.740	217.70	226.73	18.617
#1	.02966	.00377	.00632	.00016	-.00040	.04294	-.00008	-.00213	-.00073	.00427	.00764	.00460	.02005
#2	.02167	.00183	.00478	.00008	.00014	.02323	.00006	-.00155	-.00046	.00117	-.00162	-.00107	.02613

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.04942	.00015	.00011	.00123	.00073	.00126	.01425	-.00089	.00016	-.00101			
Stddev	.00920	.00005	.00004	.00064	.00045	.00067	.01294	.00060	.00042	.00226			
%RSD	18.617	31.758	39.397	52.197	61.412	53.279	90.834	67.726	263.34	224.67			
#1	.04291	.00018	.00008	.00169	.00104	.00174	-.00510	-.00132	.00046	-.00261			
#2	.05592	.00011	.00014	.00078	.00041	.00079	-.02340	-.00047	-.00014	.00059			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Units													
Avg	3295.5	56588.	5390.3										
Stddev	7.1	132.	27.7										
%RSD	.21426	.23338	.51368										
#1	3290.5	56494.	5409.9										
#2	3300.5	56681.	5370.8										

Sample Name: CCVL3296658 Acquired: 5/28/2015 23:47:06 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01055	.11318	F .01016	.10365	.00976	.00103	.10900	.19551	.00541	.01048	.01064	.01572
Stddev	.00008	.00092	.00366	.00036	.00016	.00016	.00157	.00078	.00020	.00028	.00011	.00021
%RSD	.78715	.81128	35.990	.35041	1.6406	15.055	1.4406	.39982	3.7528	2.6302	.98930	1.3274
#1	.01061	.11253	.01275	.10391	.00987	.00092	.11012	.19496	.00555	.01067	.01056	.01557
#2	.01049	.11383	.00758	.10340	.00964	.00114	.10789	.19607	.00526	.01028	.01071	.01587

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01500 -30.000%	Chk Pass								
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09217	3.1588	.01095	.21223	.01082	.01936	1.0571	.04197	2.9880	.00976	.00156	.01006
Stddev	.00267	.0491	.00216	.00422	.00002	.00027	.0183	.00031	.0106	.00181	.00125	.00181
%RSD	2.8978	1.5556	19.747	1.9892	.22929	1.4035	1.7299	.74297	.35303	18.546	80.156	17.957
#1	.09028	3.1241	.01248	.20924	.01080	.01955	1.0442	.04175	2.9805	.00848	.00067	.01134
#2	.09406	3.1936	.00942	.21521	.01084	.01917	1.0701	.04219	2.9955	.01104	.00244	.00879

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01768	.49655	1.0626	.10346	.00977	.01540	.01001	.01875	F .02615	.00969	.02246	.01381
Stddev	.00156	.03522	.0754	.00025	.00008	.00157	.00047	.00125	.01654	.00058	.00034	.00019
%RSD	8.7965	7.0930	7.0930	.24162	.77090	10.204	4.7195	6.6632	63.249	5.9528	1.5129	1.4078
#1	.01658	.47164	1.0093	.10328	.00972	.01429	.00968	.01787	.03784	.00928	.02222	.01367
#2	.01878	.52145	1.1159	.10364	.00983	.01652	.01035	.01964	.01445	.01009	.02270	.01394

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3395.7	57590.	5532.7
Stddev	5.9	197.	.0
%RSD	.17246		.34157
#1	3399.9		57729.
#2	3391.6		57451.
	5532.8		5532.7

Sample Name: 280-69636-A-2-D Acquired: 5/28/2015 23:49:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 203.44	B_2089 .03074	Ba4554 .02697	Be3130 .93974	Bi2230 .00857	Ca3179 .00366	Cd2288 .10242
#1	-.00172	203.00	.03404	.02712	.93828	.00853	-.00220	102.27	.00241
#2	-.00162	203.87	.02743	.02682	.94119	.00861	-.00511	102.58	.00255
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 205.560 {464}	Fe2714 324.754 {104}	K_7664 271.441 {124}	Li6707 766.490 {44}	Mg2790 670.784 {50}	Mn2576 279.079 {121}	Mo2020 257.610 {131}
#1	.05980	.07407	.35563	171.08	16.297	.09104	39.997	4.0559	.00507
#2	.05903	.07313	.35148	171.70	16.418	.09198	39.961	4.0648	.00534
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 231.604 {446}	Pb2203 178.284 {489}	S_1820 220.353 {453}	Sb2068 182.034 {485}	Se1960 206.833 {463}	Si2881 196.090 {472}	SiO2 288.158 {117}
#1	13.717	.06129	4.4741	.11367	2.2715	-.00800	.01075	4.2929	9.1869
#2	13.998	.05976	4.3763	.11029	2.2314	-.01842	.01430	4.2943	9.1897
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Warn 2.0000 -.01000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 407.771 {83}	Ti3349 283.730 {119}	Tl1908 334.904 {101}	U_3701 190.856 {477}	V_2924 370.152 {91}	Zn2062 292.402 {115}	Zr3391 206.200 {163}
#1	.01840	1.5643	.08953	1.0944	-.00441	-.14150	.32893	.53329	.20778
#2	.01716	1.5665	.09100	1.0949	-.00449	-.13854	.32632	.52081	.21201
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S						
#1	3572.9	58807.	6013.4						
#2	3595.1	58668.	5979.5						

Sample Name: 280-69636-A-3-B Acquired: 5/28/2015 23:52:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00227	238.81	.05563	.02746	.94558	.00962	-.00667	120.52	.00147
Stddev	.00028	.30	.00245	.00006	.00458	.00008	.00171	.62	.00004
%RSD	12.153	.12645	4.4129	.21472	.48443	.86505	25.596	.51699	2.4845
#1	-.00208	238.60	.05390	.02742	.94234	.00956	-.00546	120.08	.00150
#2	-.00247	239.03	.05737	.02750	.94881	.00968	-.00787	120.96	.00145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09854	.06679	.48168	189.99	16.426	.09407	48.949	4.3900	.00559
Stddev	.00007	.00030	.00058	.56	.045	.00031	.036	.0003	.00067
%RSD	.06986	.45155	.12139	.29405	.27281	.32914	.07385	.00728	11.941
#1	.09859	.06700	.48127	189.60	16.394	.09429	48.923	4.3898	.00606
#2	.09849	.06658	.48210	190.39	16.457	.09385	48.975	4.3902	.00512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.491	.07011	W 8.9741	.11350	.70013	W -.01696	.01164	3.6420	7.7939
Stddev	.521	.00035	.0137	.00175	.00513	.00017	.00081	.0342	.0731
%RSD	3.5975	.49209	.15249	1.5424	.73276	1.0143	6.9595	.93836	.93836
#1	14.860	.07036	8.9645	.11226	.69650	-.01708	.01107	3.6178	7.7422
#2	14.122	.06987	8.9838	.11474	.70375	-.01684	.01221	3.6662	7.8456
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Warn 2.0000 -.01000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01953	1.2077	.08983	1.0540	-.00287	F -.15201	.33423	.59405	.24079
Stddev	.00126	.0047	.00167	.0007	.00001	.00997	.00047	.00008	.00099
%RSD	6.4551	.38974	1.8627	.06244	.25909	6.5620	.14033	.01300	.41308
#1	.02042	1.2044	.09102	1.0545	-.00286	-.14495	.33390	.59411	.24008
#2	.01864	1.2111	.08865	1.0535	-.00287	-.15906	.33456	.59400	.24149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3716.6	61329.	6289.4						
Stddev	9.7	132.	26.0						
%RSD	.26221	.21550	.41366						
#1	3709.7	61422.	6307.8						
#2	3723.5	61235.	6271.0						

Sample Name: 280-69636-A-4-B Acquired: 5/28/2015 23:54:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 227.02	B_2089 .04786	Ba4554 .02869	Be3130 1.1525	Bi2230 .00889	Ca3179 -.00441	Cd2288 97.917
#1	-.00217	226.71	.04756	.02969	1.1513	.00887	-.00388	97.730	.00231
#2	-.00296	227.34	.04816	.02769	1.1537	.00891	-.00494	98.104	.00215
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 205.560 {464}	Fe2714 324.754 {104}	K_7664 271.441 {124}	Li6707 766.490 {44}	Mg2790 670.784 {50}	Mn2576 279.079 {121}2	Mo2020 257.610 {131}
#1	.08852	.10423	.31810	203.43	19.399	.09541	42.804	5.5187	.00786
#2	.08734	.10204	.31837	204.31	19.528	.09346	42.821	5.5513	.00713
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Warn -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Na8183 818.326 {41}	Ni2316 ppm	P_1782 231.604 {446}	Pb2203 178.284 {489}	S_1820 220.353 {453}	Sb2068 182.034 {485}	Se1960 206.833 {463}	Si2881 196.090 {472}
#1	9.7841	10.609	.08657	8.6509	.12410	1.2981	-.02018	.00706	3.7397
#2	9.7805	10.841	.08496	8.5207	.12176	1.2732	-.02055	.00773	3.8020
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Pass	Chk Fail 50.000	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Warn 11.000	Chk Pass	Chk Warn -1.0000	Chk Pass	Chk Pass	Chk Fail -.02000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 ppm	Sr4077 189.989 {477}	Th2837 407.771 {83}	Ti3349 283.730 {119}	Tl1908 334.904 {101}	U_3701 190.856 {477}	V_2924 370.152 {91}	Zn2062 292.402 {115}
#1	8.0029	.02033	2.1827	.09834	1.7098	.00007	-.11528	.42420	.62499
#2	8.1364	.02021	2.1888	.09809	1.7097	-.00431	-.17595	.42815	.63293
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Fail -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail -.10000	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail -.10000	Chk Pass	Chk Pass

Sample Name: 280-69636-A-4-B Acquired: 5/28/2015 23:54:51 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 278830 soil 6010b

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3750.4	61799.	6352.6
Stddev	1.5	200.	7.6
%RSD	.03971	.32319	.11960
#1	3749.3	61941.	6347.2
#2	3751.4	61658.	6358.0

Sample Name: 280-69636-A-5-B Acquired: 5/28/2015 23:57:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00353	206.66	.03572	.01767	.36101	.00923	-.00618	125.52	.00132
Stddev	.00051	.51	.00141	.00021	.00039	.00000	.00226	.19	.00007
%RSD	14.540	.24458	3.9398	1.2094	.10929	.04197	36.598	.15350	5.3166
#1	-.00389	206.31	.03672	.01752	.36128	.00923	-.00458	125.66	.00127
#2	-.00316	207.02	.03473	.01782	.36073	.00924	-.00777	125.39	.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08884	.03375	.49817	.150.17	.10.477	.06745	42.683	3.5122	.01228
Stddev	.00034	.00016	.00007	.33	.092	.00062	.038	.0039	.00017
%RSD	.38227	.48022	.01337	.21987	.87733	.91770	.08826	.11084	1.4116
#1	.08909	.03364	.49822	150.40	10.542	.06789	42.709	3.5095	.01240
#2	.08860	.03387	.49812	149.94	10.412	.06701	42.656	3.5150	.01215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.584	.04841	W 28.063	.11348	.52953	W -.01366	.00561	2.5863	5.5346
Stddev	.231	.00001	.047	.00153	.00840	.00128	.00101	.0224	.0480
%RSD	1.4829	.01200	.16826	1.3524	1.5854	9.3876	17.991	.86737	.86737
#1	15.747	.04841	28.096	.11240	.53546	-.01457	.00489	2.5704	5.5007
#2	15.420	.04842	28.029	.11457	.52359	-.01275	.00632	2.6021	5.5686
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Warn 2.0000 -.01000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01427	.87889	.06883	.62667	-.00296	F -.11604	.24039	.52653	.24232
Stddev	.00125	.00208	.00432	.00034	.00234	.04860	.00482	.00720	.00075
%RSD	8.7533	.23714	6.2733	.05446	79.110	41.882	2.0038	1.3683	.31000
#1	.01515	.88036	.06578	.62642	-.00462	-.08168	.23698	.52143	.24179
#2	.01338	.87742	.07188	.62691	-.00131	-.15041	.24380	.53162	.24285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	4421.9	73517.	7495.0						
Stddev	1.9	66.	36.7						
%RSD	.04405	.09039	.48952						
#1	4423.3	73564.	7469.0						
#2	4420.5	73470.	7520.9						

Sample Name: 280-69636-A-6-B Acquired: 5/29/2015 0:00:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278830 soil 6010b

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00415	As1890 ppm 224.14	B_2089 ppm .04276	Ba4554 ppm 0.00884	Be3130 ppm 5.5566	Bi2230 ppm .00682	Ca3179 ppm -.01113	Cd2288 ppm 124.54	Cd2288 ppm .00107
#1	-.00407	223.73	.04097	.00918	5.5595	.00683	-.01253	124.43	.00122	
#2	-.00422	224.55	.04456	.00849	5.5536	.00680	-.00973	124.64	.00093	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .09043	Cu3247 ppm .07822	Fe2714 ppm .09134	K_7664 ppm 293.84	Li6707 ppm 7.8603	Mg2790 ppm .08409	Mn2576 ppm 33.575	Mo2020 ppm 6.3276	Mo2020 ppm .01010
#1	.09107	.07832	.09155	293.52	7.8359	.08407	33.523	6.3336	.01057	
#2	.08980	.07813	.09113	294.16	7.8846	.08411	33.627	6.3217	.00963	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 28.784	P_1782 ppm .04953	Pb2203 ppm W 13.484	S_1820 ppm .07558	Sb2068 ppm .66324	Se1960 ppm F -.02867	Si2881 ppm .01131	SiO2 ppm 3.3644	SiO2 ppm 7.1998
#1	28.796	.04936	13.482	.07554	.66144	-.02688	.01560	3.3734	7.2191	
#2	28.772	.04970	13.485	.07562	.66505	-.03046	.00702	3.3553	7.1804	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Fail 50.000 -.02000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .02830	Th2837 ppm W 7.6364	Ti3349 ppm .08649	Tl1908 ppm 7.3047	U_3701 ppm -.00271	V_2924 ppm F -.18145	Zn2062 ppm .69368	Zr3391 ppm .71846	Zr3391 ppm .46744
#1	.02905	7.5955	.08629	7.3046	-.00214	-.19807	.69384	.71904	.46393	
#2	.02755	7.6773	.08669	7.3047	-.00328	-.16484	.69351	.71787	.47096	
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3813.9	Y_3774 Cts/S 62261.	377.433 {89}	6319.6			Zn2062 ppm 0.0082	Zr3391 ppm 0.00497	
#1	3800.8	62175.	6335.3							
#2	3827.1	62346.	6303.9							

Sample Name: CCVH-3283796 Acquired: 5/29/2015 0:02:43 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00544	49.105	-.00076	-.00031	.00085	.00016	1.0281	.04351	-.00011	-.00089	.00037	.00261	48.502
Stddev	.00067	.363	.00296	.00033	.00024	.00003	.0022	.00036	.00023	.00007	.00005	.00013	.874
%RSD	12.291	.73963	386.87	104.09	28.114	21.135	.21085	.82492	208.25	7.8497	13.658	5.1122	1.8017
#1	-.00497	48.848	.00133	-.00054	.00101	.00014	1.0266	.04326	.00005	-.00094	.00034	.00270	47.884
#2	-.00592	49.362	-.00286	-.00008	.00068	.00019	1.0297	.04377	-.00028	-.00084	.00041	.00252	49.120

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.06532	.00409	.05017	-.00012	-.00027	259.64	.00262	.00475	-.00071	5.0500	-.01160	.01211	-.00328
Stddev	.03002	.00040	.00288	.00113	.00013	2.09	.00005	.00342	.00357	.0171	.00012	.00719	.02235
%RSD	45.954	9.7327	5.7505	963.68	45.635	.80546	2.0690	71.976	505.05	.33773	1.0771	59.351	682.30
#1	.08655	.00381	.05221	.00068	-.00036	258.16	.00259	.00716	-.00323	5.0379	-.01151	.00703	-.01908
#2	.04410	.00437	.04813	-.00092	-.00019	261.12	.00266	.00233	.00182	5.0621	-.01169	.01719	.01253

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.00701	-.00193	.00116	4.9921	-.01174	.00131	10.338	.00328	-.00096	-.12369
Stddev	.04783	.00104	.00016	.0055	.00092	.00198	.071	.00024	.00030	.00304
%RSD	682.30	53.958	13.934	.11007	7.8260	150.74	.68876	7.1836	31.454	2.4618
#1	-.04083	-.00119	.00128	4.9882	-.01109	-.00009	10.287	.00345	-.00075	-.12584
#2	.02681	-.00266	.00105	4.9960	-.01239	.00272	10.388	.00312	-.00117	-.12153

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3287.3	55179.	5352.0
Stddev	11.3	36.	22.4
%RSD	.34375		.41877
#1	3279.3		55205.
#2	3295.3		55154.
	5367.9		5336.2

Sample Name: CCV-3290307 Acquired: 5/29/2015 0:05:19 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49300	.52645	.98881	.50204	.47825	.45651	-.00316	4.6863	.50299	.49933	.50551	.49841	2.2751
Stddev	.00278	.00172	.00715	.00073	.00303	.00365	.00090	.0326	.00003	.00020	.00274	.00119	.0190
%RSD	.56454	.32748	.72269	.14503	.63321	.79930	28.406	.69627	.00651	.04070	.54212	.23933	.83272
#1	.49103	.52767	.99386	.50255	.48039	.45909	-.00253	4.7094	.50297	.49919	.50745	.49757	2.2885
#2	.49496	.52523	.98375	.50152	.47610	.45393	-.00380	4.6632	.50301	.49947	.50357	.49925	2.2617

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	50.152	.99201	19.715	.50382	.48919	4.9524	.49869	1.0019	1.0073	-.00317	.99514	.99611	4.6939
Stddev	.404	.00471	.057	.00217	.00087	.0327	.00012	.0016	.0042	.01020	.00260	.00083	.0336
%RSD	.80492	.47478	.29013	.43134	.17789	.65989	.02381	.15644	.41263	321.25	.26098	.08324	.71598
#1	50.437	.99534	19.675	.50228	.48981	4.9755	.49860	1.0030	1.0102	-.01038	.99698	.99553	4.7177
#2	49.866	.98868	19.756	.50535	.48858	4.9293	.49877	1.0008	1.0044	.00404	.99330	.99670	4.6702

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.045	.99193	.47642	-.00692	.49283	1.0197	-.01894	.50004	.51168	.47155
Stddev	.072	.00187	.00338	.00071	.00277	.0030	.00135	.00401	.00349	.00052
%RSD	.71598	.18851	.71005	10.264	.56279	.29166	7.1161	.80223	.68153	.11096
#1	10.096	.99060	.47882	-.00742	.49087	1.0218	-.01798	.50288	.51414	.47192
#2	9.9942	.99325	.47403	-.00642	.49479	1.0176	-.01989	.49721	.50921	.47118

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3336.8	56364.	5517.5									
Stddev	7.4	111.	49.2									
%RSD	.22269	.19746	.89187									
#1	3342.0	56442.	5482.7									
#2	3331.5	56285.	5552.3									

Sample Name: CCB Acquired: 5/29/2015 0:07:50 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00080	.00426	-.00102	-.00001	-.00015	.00000	-.00145	.00028	-.00037	-.00007	.00011	-.00030	.00599
Stddev	.00049	.00226	.00104	.00066	.00010	.0001	.00088	.00112	.00001	.00038	.00012	.00026	.00244
%RSD	61.784	52.930	102.00	5755.4	69.850	22282.	60.165	401.03	1.8905	559.40	109.62	86.615	40.758
#1	.00114	.00586	-.00029	.00046	-.00008	.00005	-.00084	-.00051	-.00038	.00020	.00002	-.00048	.00772
#2	.00045	.00267	-.00176	-.00048	-.00022	-.00005	-.00207	.00107	-.00037	-.00034	.00019	-.00012	.00426

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.04624	.00101	.00512	.00012	.00026	.03946	.00016	-.00062	.00061	-.00323	.00242	.00209	.02646
Stddev	.06782	.00141	.00357	.00002	.00010	.00050	.00025	.00087	.00195	.00375	.00167	.00193	.00886
%RSD	146.65	138.98	69.673	20.235	37.545	1.2770	154.05	139.47	319.73	116.01	69.198	92.636	33.475
#1	.09420	.00201	.00260	.00014	.00032	.03982	.00033	-.00001	-.00077	-.00588	.00123	.00072	.02020
#2	-.00171	.00002	.00764	.00011	.00019	.03911	-.00001	-.00124	.00199	-.00058	.00360	.00346	.03272

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.05663	.00072	.00016	-.00081	.00030	.00121	-.02118	-.00040	-.00029	.00124			
Stddev	.01896	.00015	.00008	.000372	.00013	.00310	.03370	.00015	.00009	.00024			
%RSD	33.475	21.442	47.946	459.23	42.010	257.18	159.11	37.121	32.229	19.499			
#1	.04322	.00082	.00022	-.00344	.00021	.00340	.00265	-.00051	-.00035	.00107			
#2	.07003	.00061	.00011	.00182	.00039	-.00099	-.04501	-.00030	-.00022	.00141			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3318.4	56730.	5357.3										
Stddev	6.5	343.	66.1										
%RSD	.19462	.60472	1.2339										
#1	3323.0	56972.	5404.0										
#2	3313.9	56487.	5310.5										

Sample Name: CCVL3296658 Acquired: 5/29/2015 0:10:13 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01046	F .13708	.01394	.10359	.00995	.00104	.10576	.19371	.00525	.01046	.01063	.01554
Stddev	.00019	.04023	.00220	.00037	.00007	.00010	.00073	.00189	.00001	.00052	.00003	.00032
%RSD	1.8463	29.347	15.778	.35470	.66485	9.4751	.68847	.97820	.17581	4.9244	.25821	2.0824

#1	.01032	.16553	.01550	.10333	.00999	.00097	.10525	.19505	.00524	.01083	.01061	.01531
#2	.01059	.10864	.01239	.10385	.00990	.00111	.10627	.19237	.00525	.01010	.01065	.01577

Check ? Value Range	Chk Pass	Chk Fail .10000	Chk Pass 30.000%	Chk Pass								
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09420	3.2238	.01150	.21703	.01080	.01934	1.0871	.04142	2.9835	.00882	.00078	.00996
Stddev	.00244	.0699	.00032	.00533	.00013	.00008	.0059	.00041	.0004	.00146	.00419	.00281
%RSD	2.5905	2.1689	2.8126	2.4538	1.2408	.43732	.53789	.98103	.01305	16.492	537.29	28.204

#1	.09248	3.1744	.01127	.22080	.01090	.01928	1.0830	.04171	2.9832	.00985	.00374	.00797
#2	.09593	3.2732	.01173	.21327	.01071	.01940	1.0912	.04114	2.9838	.00779	-.00218	.01195

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01944	.48684	1.0418	.10238	.01018	.01364	.00993	.01802	F .02194	.00970	.02224	.01477
Stddev	.00420	.01671	.0358	.00176	.00010	.00145	.00008	.00053	.03509	.00060	.00014	.00183
%RSD	21.585	3.4329	3.4329	1.7228	.95378	10.617	.85038	2.9532	159.94	6.1707	.64998	12.386

#1	.01647	49866	1.0671	.10363	.01011	.01261	.00999	.01764	.04675	.01013	.02214	.01606
#2	.02240	.47502	1.0165	.10114	.01025	.01466	.00987	.01840	-.00287	.00928	.02235	.01348

Check ? Value Range	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Pass							
									-30.000%			

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3425.0	57996.	5459.1									
Stddev	7.9	191.	11.7									
%RSD	.23012	.32982	.21365									

#1	3419.5	58132.	5450.9									
#2	3430.6	57861.	5467.4									

Sample Name: MB 280-279233/1-A Acquired: 5/29/2015 0:12:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00031	.00202	-.00432	.00019	.00004	.00009	-.00551	.08965	.00050
#2	-.00018	.00141	-.00526	.00074	.00044	.00001	.00124	.08795	.00034
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00010	.00013	.00223	.03093	-.00680	.00139	.00518	.00023	.00020
#2	.00015	-.00017	.00150	.03252	.02673	.00109	.01062	.00022	.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.01630	.00077	-.00357	.00053	.00205	-.00177	.00713	.06260	.13396
#2	.02668	.00011	-.00186	-.00076	.00165	-.00340	.00363	.04964	.10623
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00002	.00028	.00067	-.00002	.00148	-.00209	-.00067	.00167	.00041
#2	-.00109	.00015	-.00052	.00048	.00050	.02864	-.00011	.00140	.00241
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3387.0	57241.	5467.8						
#2	3357.1	57570.	5448.7						

Sample Name: LCS 280-279233/2-A Acquired: 5/29/2015 0:15:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04700	1.9630	.97329	.99242	1.9336	.04636	1.9723	46.067	.10057
#2	.04545	1.9672	.97095	.99417	1.9359	.04631	1.9734	46.154	.10012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48568	.19224	.25074	.90945	50.763	1.0072	48.747	.49891	1.0186
#2	.48722	.19257	.24894	.91958	51.057	1.0001	48.637	.49883	1.0209
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	52.977	.48423	10.176	.49305	1.9810	.50485	1.9831	9.3368	19.981
#2	53.225	.48785	10.218	.49897	1.9790	.50605	1.9778	9.3325	19.972
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9734	.96007	.99385	.98482	1.9571	2.0572	.50200	.49483	.44472
#2	1.9874	.96144	.99307	.98378	1.9645	2.0639	.50247	.49831	.45124
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3191.3	54729.	5420.3						
#2	3178.9	54403.	5374.9						

Sample Name: 280-69729-C-2-A Acquired: 5/29/2015 0:17:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00012	As1890 ppm .01468	B_2089 ppm .00039	Ba4554 ppm .58257	Be3130 ppm .21878	Bi2230 ppm .00007	Ca3179 ppm 70.652	Cd2288 ppm .00044
#1	.00065	.01496	.00292	.58483	.22131	.00009	-.00391	71.190	.00037
#2	-.00041	.01441	-.00370	.58031	.21625	.00006	-.00585	70.114	.00052
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00016	Cu3247 ppm W .35459	Fe2599 ppm .00079	K_7664 ppm .01616	Li6707 ppm 1.6580	Mg2790 ppm .01656	Mn2576 ppm 45.443	Mo2020 ppm .01008
#1	.00016	.35519	.00053	.01682	1.6689	.01740	45.462	.00998	.00042
#2	.00016	.35398	.00105	.01551	1.6471	.01573	45.424	.01018	.00039
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 38.275	P_1782 ppm .00525	Pb2203 ppm .00392	S_1820 ppm .00303	Sb2068 ppm 9.3142	Se1960 ppm .00742	Si2881 ppm .00580	SiO2 ppm 8.3204
#1	38.184	.00503	.00446	.00452	9.3708	.01041	.00649	8.3204	17.806
#2	38.365	.00547	.00337	.00153	9.2575	.00442	.00512	8.3203	17.805
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00145	Th2837 ppm 1.0940	Ti3349 ppm .00064	Tl1908 ppm .00008	U_3701 ppm -.00633	V_2924 ppm -.01328	Zn2062 ppm .00434	Zr3391 ppm -.00039
#1	.00176	1.1011	-.00137	-.00003	-.00438	-.02198	.00398	.00023	.00231
#2	.00115	1.0869	.00009	.00018	-.00829	-.00458	.00471	-.00100	.00161
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3230.3	Y_3774 Cts/S 55067.	377.433 {89}					
#1	3232.9	55169.	5437.7						
#2	3227.7	54964.	5515.7						

Sample Name: 280-69729-C-2-Asd@5 Acquired: 5/29/2015 0:20:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00101	.00206	-.00355	.11401	.04457	.00005	-.00437	14.326	.00009
Stddev	.00041	.00046	.00039	.00010	.00037	.00002	.00088	.076	.00016
%RSD	41.059	22.183	11.091	.08395	.83403	33.397	20.238	.52723	177.97
#1	.00130	.00239	-.00327	.11395	.04483	.00006	-.00499	14.379	.00020
#2	.00072	.00174	-.00383	.11408	.04430	.00004	-.00374	14.272	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.07322	.00017	.00560	.34600	.00506	9.2579	.00205	-.00033
Stddev	.00034	.00044	.00018	.00090	.04614	.00027	.0201	.00005	.00018
%RSD	912.60	.59839	104.62	16.064	13.336	5.2767	.21702	2.2400	54.081
#1	-.00021	.07291	.00004	.00497	.37863	.00525	9.2437	.00202	-.00020
#2	.00028	.07353	.00030	.00624	.31338	.00487	9.2721	.00208	-.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.1342	.00199	.00133	.00091	1.8036	-.00099	.00451	1.6754	3.5854
Stddev	.0247	.00041	.00105	.00021	.0076	.00063	.00410	.0131	.0279
%RSD	.34675	20.582	78.743	23.689	.42000	63.858	90.837	.77906	.77906
#1	7.1517	.00170	.00059	.00076	1.7983	-.00144	.00741	1.6662	3.5657
#2	7.1167	.00228	.00207	.00106	1.8090	-.00054	.00161	1.6847	3.6052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00101	.21898	-.00065	-.00010	-.00164	-.04074	.00076	-.00061	.00157
Stddev	.00046	.00083	.00119	.00010	.00018	.00347	.00079	.00030	.00147
%RSD	45.487	.38080	183.68	100.42	11.091	8.5118	103.78	49.952	93.430
#1	.00134	.21957	-.00149	-.00017	-.00151	-.03829	.00020	-.00082	.00053
#2	.00069	.21839	.00019	-.00003	-.00177	-.04319	.00132	-.00039	.00261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3324.5	56117.	5407.6						
Stddev	21.4	262.	1.2						
%RSD	.64398	.46653	.02214						
#1	3309.4	56302.	5406.8						
#2	3339.7	55932.	5408.5						

Sample Name: 280-69729-C-2-B MS Acquired: 5/29/2015 0:23:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04699	1.9649	1.0109	1.5980	2.1967	.04755	2.0007	119.12	.10276
#2	.04646	1.9562	1.0064	1.6005	2.2440	.04841	2.0125	121.58	.10223
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48638	.54131	.25461	.93497	54.274	1.0470	96.395	.50984	1.0382
#2	.48810	.54177	.25497	.95181	55.300	1.0736	96.411	.51012	1.0389
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	93.735	.48656	10.493	.49938	11.650	.52454	2.0337	18.047	38.621
#2	95.203	.48942	10.521	.49524	11.696	.52156	2.0451	18.529	39.652
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9854	2.1050	1.0114	1.0022	1.9245	2.1042	.51399	.50202	.45774
#2	2.0030	2.1475	1.0148	1.0015	1.9434	2.0899	.51364	.50636	.47434
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3154.6	53622.	5283.9						
#2	3156.8	53452.	5234.6						

Sample Name: 280-69729-C-2-C MSD Acquired: 5/29/2015 0:25:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04692	As1890 ppm 1.9784	B_2089 ppm 1.0139	Ba4554 ppm 1.6149	Be3130 ppm 2.2220	Bi2230 ppm .04783	Ca3179 ppm F 2.0326	Cd2288 ppm 120.15
#1	.04681	1.9769	1.0105	1.6133	2.1996	.04719	2.0344	118.90	.10378
#2	.04704	1.9798	1.0172	1.6164	2.2443	.04848	2.0307	121.40	.10369
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .49204	Cu3247 ppm W .54330	Fe2599 ppm .25482	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	.49193	.54265	.25548	.92873	54.004	1.0491	96.730	.51378	1.0434
#2	.49216	.54395	.25417	.94670	55.408	1.0696	97.004	.51371	1.0459
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 93.706	P_1782 ppm .49172	Pb2203 ppm W 10.650	S_1820 ppm .50140	Sb2068 ppm 11.731	Se1960 ppm .52345	Si2881 ppm 2.0588	SiO2 ppm 18.302
#1	92.998	.49093	10.635	.50170	11.738	.52078	2.0508	18.203	38.955
#2	94.415	.49252	10.665	.50109	11.723	.52613	2.0667	18.400	39.377
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0116	Th2837 ppm 2.1211	Ti3349 ppm 1.0150	Tl1908 ppm 1.0090	U_3701 ppm 1.9544	V_2924 ppm 2.1164	Zn2062 ppm .51686	Zr3391 ppm .50368
#1	2.0034	2.0978	1.0138	1.0088	1.9441	2.1398	.51825	.50199	.45924
#2	2.0199	2.1444	1.0161	1.0091	1.9648	2.0931	.51548	.50536	.47031
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3153.2	Y_3774 Cts/S 52936.	377.433 {89}				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	3153.2	52991.	5281.0						
#2	3153.3	52880.	5192.1						

Sample Name: 280-69729-C-2-Apds Acquired: 5/29/2015 0:27:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04458	.99980	.19515	.67323	.31023	.04596	-.00192	87.437	.05163
#2	.04620	.99298	.19912	.66847	.30796	.04589	.00186	86.778	.05081
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.04829	.39417	.04939	.91111	21.853	.11810	63.862	.05867	.05004
#2	.04822	.39040	.05016	.90970	21.629	.11757	63.835	.05867	.04854
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	58.153	.05312	2.0709	.09911	9.3000	.10535	.21029	12.823	27.441
#2	58.487	.05185	2.0312	.09649	9.1602	.10213	.20749	12.771	27.330
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.10080	1.1188	.19775	.04972	.18643	.49005	.05297	.20507	.04234
#2	.09994	1.1101	.19939	.04906	.18788	.48307	.05517	.20629	.04272
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3211.2	54092.	5351.6						
#2	3216.6	54557.	5388.9						

Sample Name: 280-69795-B-5-A Acquired: 5/29/2015 0:30:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279233 6010c q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.10398	-.00031	.35359	.24791	.00011	-.00328	103.79	.00006
Stddev	.00009	.00030	.00579	.00529	.00271	.00000	.00285	1.16	.00002
%RSD	21.532	.28377	1895.2	1.4958	1.0949	4.4900	86.922	1.1157	33.480
#1	.00050	.10419	-.00440	.34985	.24983	.00011	-.00127	104.60	.00007
#2	.00037	.10377	.00379	.35733	.24599	.00010	-.00530	102.97	.00004
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00110	.00735	.00501	.23618	6.3507	.02287	20.695	.28626	.00991
Stddev	.00004	.00012	.00036	.00043	.0025	.00069	.087	.00093	.00022
%RSD	4.0645	1.6261	7.2427	.18189	.03956	3.0176	.42158	.32567	2.2454
#1	.00113	.00744	.00475	.23588	6.3490	.02238	20.757	.28692	.01007
#2	.00107	.00727	.00526	.23649	6.3525	.02335	20.634	.28560	.00976
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	72.617	.01822	.06606	.00376	93.965	.00458	.00859	5.3553	11.460
Stddev	.245	.00010	.00225	.00004	.244	.00053	.00273	.0296	.063
%RSD	.33716	.53742	3.4021	1.0303	.25949	11.517	31.848	.55215	.55215
#1	72.790	.01815	.06447	.00379	94.138	.00495	.00665	5.3344	11.416
#2	72.444	.01829	.06765	.00373	93.793	.00421	.01052	5.3762	11.505
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00101	.83048	.00144	.00207	-.00653	-.03889	.00304	.00825	.00142
Stddev	.00077	.00838	.00195	.00026	.00055	.01674	.00084	.00052	.00008
%RSD	76.835	1.0094	134.80	12.565	8.3581	43.038	27.521	6.3490	5.3279
#1	.00156	.83641	.00282	.00226	-.00691	-.05072	.00244	.00862	.00148
#2	.00046	.82455	.00007	.00189	-.00614	-.02705	.00363	.00788	.00137
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3225.4	54734.	5411.5						
Stddev	8.7	244.	87.8						
%RSD	.26858	.44642	1.6226						
#1	3219.3	54561.	5349.4						
#2	3231.5	54906.	5473.6						

Sample Name: CCVH-3283796 Acquired: 5/29/2015 0:33:05 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-00626	47.948	-00470	.00264	.00063	.00019	1.0117	.03672	-.00021	-.00055	.00043	.00331	47.146
Stddev	.00090	.143	.00130	.00103	.00027	.00002	.0020	.00393	.00003	.00030	.00011	.00037	.341
%RSD	14.435	.29913	27.658	38.790	42.648	8.6567	.19420	10.694	12.904	53.943	24.630	11.300	.72390
#1	-.00690	47.846	-.00561	.00192	.00082	.00020	1.0103	.03950	-.00023	-.00076	.00051	.00357	46.904
#2	-.00562	48.049	-.00378	.00337	.00044	.00018	1.0131	.03395	-.00019	-.00034	.00036	.00304	47.387

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.09736	.00352	.04228	-.00138	-.00018	255.37	.00306	.00193	.00145	5.0023	-.01337	.00954	-.00050
Stddev	.03089	.00052	.00866	.00016	.00001	.24	.00013	.00163	.00025	.0145	.00137	.00371	.02644
%RSD	31.724	14.829	20.487	11.287	5.4274	.09207	4.1124	84.054	17.449	.29056	10.260	38.872	5247.1
#1	.11920	.00389	.03615	-.00127	-.00017	255.20	.00315	.00078	.00127	4.9920	-.01434	.00691	.01819
#2	.07552	.00315	.04840	-.00149	-.00018	255.53	.00297	.00308	.00163	5.0125	-.01240	.01216	-.01920

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.00108	-.00248	.00035	4.9752	-.01364	.00318	10.327	.00358	.00027	-.12848
Stddev	.05658	.00120	.00003	.0064	.00039	.00049	.059	.00082	.00019	.00229
%RSD	5247.1	48.640	7.8017	.12819	2.8634	15.460	.57057	22.792	68.843	1.7820
#1	.03893	-.00162	.00033	4.9707	-.01337	.00283	10.285	.00300	.00014	-.12686
#2	-.04109	-.00333	.00037	4.9797	-.01392	.00352	10.368	.00415	.00040	-.13010

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3289.9	54484.	5326.4
Stddev	10.9	96.	23.1
%RSD	.33162	.17560	.43364
#1	3297.6	54552.	5342.8
#2	3282.1	54416.	5310.1

Sample Name: CCV-3290307 Acquired: 5/29/2015 0:35:41 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49211	Al1670 ppm .51770	As1890 ppm .98986	B_2089 ppm .50158	Ba4554 ppm .48315	Be3130 ppm .45969	Bi2230 ppm -.00242	Ca3179 ppm 4.7340	Cd2288 ppm .49936	Co2286 ppm .50318	Cr2055 ppm .50942	Cu3247 ppm .49432	Fe2599 ppm 2.2807
#1	.49038	.51928	.98713	.50004	.48440	.46076	-.00097	4.7508	.49974	.50255	.50892	.49311	2.2818
#2	.49383	.51612	.99258	.50311	.48190	.45863	-.00386	4.7172	.49899	.50381	.50991	.49552	2.2796
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm 50.647	Li6707 ppm 1.0049	Mg2790 ppm 19.819	Mn2576 ppm .50149	Mo2020 ppm .49107	Na5895 ppm 5.0230	Ni2316 ppm .50157	P_1782 ppm .99914	Pb2203 ppm 1.0102	S_1820 ppm .00365	Sb2068 ppm .99473	Se1960 ppm .99653	Si2881 ppm 4.6925
#1	50.715	1.0036	19.786	.50019	.48951	5.0328	.50025	.99517	1.0076	.00166	.99276	1.0006	4.7056
#2	50.579	1.0062	19.852	.50279	.49264	5.0131	.50289	1.0031	1.0129	.00565	.99671	.99250	4.6793
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 10.042	Sn1899 ppm .99695	Sr4077 ppm .48087	Th2837 ppm -.00476	Ti3349 ppm .49127	TI1908 ppm 1.0252	U_3701 ppm -.02125	V_2924 ppm .49748	Zn2062 ppm .50219	Zr3391 ppm .47388			
#1	10.070	.99396	.48208	-.00598	.49022	1.0232	.01333	.49775	.50110	.47177			
#2	10.014	.99994	.47966	-.00355	.49232	1.0272	-.05583	.49721	.50329	.47599			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3343.4	Y_3600 Cts/S 56181.	Y_3774 Cts/S 5423.8										
#1	3342.7	56360.	5422.1										
#2	3344.1	56001.	5425.6										

Sample Name: CCB Acquired: 5/29/2015 0:38:10 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00018	-.00060	-.00420	.00207	-.00002	.00000	-.00484	-.00025	.00018	-.00063	-.00009	.00013	-.00034
Stddev	.00046	.00029	.00323	.00023	.00024	.0000	.00211	.00000	.00026	.00002	.00008	.00025	.00073
%RSD	256.38	49.429	76.862	11.248	1150.0	771.09	43.663	.40754	143.32	3.2747	85.287	188.89	216.53
#1	.00050	-.00080	-.00648	.00223	.00015	.00001	-.00634	-.00025	.00000	-.00061	-.00004	-.00004	.00018
#2	-.00014	-.00039	-.00192	.00190	-.00019	-.00002	-.00335	-.00025	.00036	-.00064	-.00015	.00030	-.00085

Check ?
High Limit
Low Limit

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.05597	.00059	.00462	.00019	.00017	.05113	-.00004	-.00540	-.00080	.00266	.00364	.00036	.02193
Stddev	.01466	.00129	.00632	.00017	.00037	.00544	.00057	.00166	.00121	.00265	.00329	.00036	.00638
%RSD	26.193	218.94	136.62	91.301	217.42	10.640	1537.0	30.654	150.21	99.626	90.475	99.536	29.090
#1	.04560	.00150	.00909	.00031	-.00009	.05497	-.00044	-.00423	-.00166	.00453	.00131	.00061	.01742
#2	.06634	-.00032	.00016	.00007	.00043	.04728	.00037	-.00657	.00005	.00079	.00597	.00011	.02644

Check ?
High Limit
Low Limit

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.04692	-.00017	.00007	.00170	.00008	-.00043	-.00392	-.00064	-.00059	.00219
Stddev	.01365	.00030	.00002	.00034	.00031	.00185	.02207	.00007	.00004	.00058
%RSD	29.090	177.65	31.385	20.144	366.07	428.79	563.67	11.445	5.9863	26.581
#1	.03727	.00004	.00009	.00146	.00030	.00088	.01169	-.00059	-.00062	.00178
#2	.05658	-.00038	.00006	.00194	-.00013	-.00174	-.01952	-.00070	-.00057	.00260

Check ?
High Limit
Low Limit

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3344.7	57276.	5373.4
Stddev	3.7	137.	65.4
%RSD	.11059		.23961
#1	3342.1		57179.
#2	3347.3		57373.
	5327.1		5419.6

Sample Name: CCVL3296658 Acquired: 5/29/2015 0:40:34 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.01014	.10687	.01459	.10288	.00976	.00106	.11003	.19198	.00519	.01023	.01066	.01487	.09101	3.2331
Stddev	.00003	.00097	.00132	.00183	.00041	.00014	.00044	.00202	.00018	.00016	.00034	.00025	.00160	.0110
%RSD	.32970	.90450	9.0410	1.7792	4.2150	13.633	.39589	1.0509	3.4231	1.5551	3.2033	1.7076	1.7569	.34046
#1														
#2														

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.01139	.21518	.01075	.01957	1.0962	.04230	2.9616	.00869	.00171	.01271	.01735	.49378	1.0567	.10432
Stddev	.00129	.00643	.00004	.00019	.0081	.00068	.0017	.00042	.00075	.00209	.00255	.01427	.0306	.00073
%RSD	11.354	2.9878	.32620	.96203	.73826	1.6079	.05801	4.8838	44.024	16.452	14.722	2.8906	2.8906	.69832
#1														
#2														

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01004	.01323	.01032	.01914	.05141	.00914	.02263	.01366
Stddev	.00012	.00023	.00041	.00177	.00601	.00025	.00030	.00225
%RSD	1.2041	1.7384	3.9860	9.2544	11.685	2.7357	1.3231	16.448
#1								
#2								

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3406.5	57520.	5363.4
Stddev	7.5	212.	72.1
%RSD	.21952	.36847	1.3434
#1	3411.8	57670.	5414.3
#2	3401.2	57370.	5312.4

Sample Name: Ib 280-278466/1-f Acquired: 5/29/2015 0:43:13 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.00387	-.00099	.00754	.00077	.00012	-.00429	W .10743	.00020
Stddev	.00071	.00070	.00181	.00127	.00010	.00010	.00166	.00165	.00009
%RSD	147.59	18.047	182.56	16.863	13.206	83.890	38.622	1.5351	44.122
#1	-.00002	.00436	-.00227	.00844	.00070	.00005	-.00312	.10626	.00014
#2	.00098	.00338	.00029	.00664	.00085	.00019	-.00547	.10860	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00076	.00033	.00269	.02313	.17355	.00227	.01465	.00102	-.00025
Stddev	.00018	.00038	.00021	.00092	.01674	.00017	.00247	.00005	.00032
%RSD	23.508	115.29	7.7306	3.9575	9.6433	7.7003	16.838	5.3514	128.93
#1	-.00063	.00006	.00254	.02378	.18538	.00214	.01639	.00098	-.00002
#2	-.00089	.00059	.00283	.02249	.16171	.00239	.01291	.00106	-.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	324.68	.00012	.00157	F .02058	.01153	.00214	.00099	.03518	.07528
Stddev	2.65	.00002	.00113	.00152	.00007	.00012	.00277	.01201	.02570
%RSD	.81553	12.782	71.494	7.3678	.63635	5.6248	280.17	34.142	34.142
#1	326.55	.00013	.00078	.01951	.01158	.00205	.00295	.04367	.09345
#2	322.80	.00011	.00237	.02166	.01148	.00222	-.00097	.02668	.05711
Check ?	None	Chk Pass	Chk Pass	Chk Fail .00900 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00046	.00107	-.00001	.00025	-.04256	-.00117	.00304	.00067
Stddev	.00152	.00005	.00089	.00028	.00112	.02102	.00051	.00007	.00277
%RSD	14083.	11.146	82.622	5212.7	457.53	49.389	43.960	2.4093	414.45
#1	-.00106	.00042	.00045	-.00020	.00104	-.02769	-.00081	.00299	.00263
#2	.00108	.00050	.00170	.00019	-.00055	-.05742	-.00153	.00309	-.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3226.9	53640.	5378.5						
Stddev	3.6	83.	48.0						
%RSD	.11171	.15546	.89304						
#1	3229.4	53699.	5344.6						
#2	3224.3	53581.	5412.5						

Sample Name: Ics 280-278466/2-f Acquired: 5/29/2015 0:46:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .41438	As1890 ppm .82093	B_2089 ppm .20741	Ba4554 ppm 2.4210	Be3130 ppm .00964	Bi2230 ppm .40457	Ca3179 ppm 9.7015	Cd2288 ppm .23036
#1	.21566	.41510	.82980	.20765	2.3989	.00947	.40387	9.6133	.23081
#2	.21545	.41366	.81206	.20717	2.4432	.00980	.40527	9.7898	.22990
Check ? High Limit Low Limit	Chk Pass	Chk Warn .43200 1.7200	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F 1.0257	Cu3247 ppm .46508	Fe2599 ppm .19614	K_7664 ppm F 11.107	Li6707 ppm .21563	Mg2790 ppm 9.8465	Mn2576 ppm .10458	Mo2020 ppm .21074
#1	.10034	1.0285	.46364	.19068	10.999	.21363	9.8392	.10452	.21166
#2	.09925	1.0230	.46652	.20159	11.214	.21762	9.8538	.10464	.20982
Check ? High Limit Low Limit	Chk Pass	Chk Fail .25200 .16800	Chk Pass	Chk Pass	Chk Fail 11.000 8.9000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm F 337.65	P_1782 ppm .10074	Pb2203 ppm 2.1267	S_1820 ppm 1.1287	Sb2068 ppm .42960	Se1960 ppm F 11.174	Si2881 ppm .63136	SiO2 ppm 1.9632 F 4.2013
#1	334.33	.10095	2.1287	1.1322	.42493	.11224	.63488	1.9236	4.1164
#2	340.96	.10053	2.1248	1.1252	.43426	.11124	.62784	2.0029	4.2861
Check ? High Limit Low Limit	Chk Fail 11.200 9.1000	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .10800 .08800	Chk Pass	Chk Pass	Chk Fail 4.9220 4.0200
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .40579	Th2837 ppm .19926	Ti3349 ppm .20777	Tl1908 ppm .20999	U_3701 ppm .38562	V_2924 ppm .38112	Zn2062 ppm .10493	Zr3391 ppm .54163 .09372
#1	.40587	.19738	.20412	.20952	.38807	.36448	.10529	.53857	.09352
#2	.40571	.20114	.21142	.21046	.38316	.39776	.10458	.54468	.09392
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3212.7	Y_3774 Cts/S 53625.	377.433 {89}					
#1	3214.4	53881.	5491.6						
#2	3211.0	53370.	5383.3						

Sample Name: 280-69513-a-5-d Acquired: 5/29/2015 0:48:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00011	.00724	-.00144	.00883	.38638	-.00005	-.00242	134.87	.00012
#2	.00020	.00696	.00418	.00827	.39416	-.00007	-.00435	137.38	.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00049	.00053	.00329	.00980	.87451	.00690	4.2214	.15063	-.00250
#2	-.00003	.00073	.00242	.00960	.88796	.00565	4.1747	.14988	-.00210
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	319.77	.00765	.00954	.05039	.91783	.00401	.00868	.78223	1.6740
#2	326.64	.00799	.01224	.05050	.91782	.00129	.00675	.78542	1.6808
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00209	.27235	-.00178	-.00072	-.01264	-.02502	.00061	.00444	.00228
#2	.00006	.27691	.00064	-.00045	-.01134	-.02739	-.00017	.00397	.00021
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3147.1	53125.	5445.8						
#2	3159.1	52759.	5308.6						

Sample Name: 280-69513-a-6-h Acquired: 5/29/2015 0:51:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.01261	-.00555	.00732	.39162	.00006	-.00490	98.237	.00105
Stddev	.00023	.00031	.00330	.00043	.00324	.00003	.00172	.863	.00008
%RSD	50.614	2.4643	59.506	5.8729	.82785	44.862	35.158	.87856	7.2517
#1	.00030	.01239	-.00788	.00701	.38933	.00009	-.00611	97.627	.00110
#2	.00063	.01283	-.00321	.00762	.39391	.00004	-.00368	98.847	.00099
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	.00072	.00252	.01451	.50987	.00457	2.7977	.00746	-.00272
Stddev	.00010	.00000	.00001	.00008	.03167	.00095	.0405	.00010	.00013
%RSD	14.816	.60355	.28359	.55652	6.2113	20.758	1.4471	1.3681	4.7952
#1	-.00061	.00073	.00253	.01457	.48748	.00390	2.7690	.00739	-.00282
#2	-.00075	.00072	.00252	.01446	.53227	.00524	2.8263	.00754	-.00263
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	316.66	.00367	.02637	.01080	.14891	.00053	.00241	1.0104	2.1622
Stddev	3.33	.00045	.00152	.00060	.00565	.00324	.00314	.0104	.0222
%RSD	1.0509	12.158	5.7564	5.5329	3.7911	616.16	130.56	1.0244	1.0244
#1	314.31	.00398	.02529	.01123	.14491	-.00177	.00463	1.0031	2.1466
#2	319.01	.00335	.02744	.01038	.15290	.00282	.00018	1.0177	2.1779
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	.16838	-.00059	-.00014	-.00712	-.02482	.00042	.01348	.00135
Stddev	.00012	.00191	.00143	.00051	.00015	.01616	.00006	.00021	.00156
%RSD	10.639	1.1314	242.24	365.20	2.1656	65.115	13.062	1.5532	115.46
#1	.00121	.16703	.00042	.00022	-.00701	-.03624	.00046	.01333	.00025
#2	.00104	.16973	-.00160	-.00050	-.00723	-.01339	.00038	.01363	.00246
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3187.8	53735.	5431.8						
Stddev	1.7	102.	61.2						
%RSD	.05455	.19017	1.1269						
#1	3186.6	53807.	5475.0						
#2	3189.0	53663.	5388.5						

Sample Name: 280-69513-a-6-hSD@5 Acquired: 5/29/2015 0:54:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00005	As1890 ppm .04585	B_2089 ppm .00217	Ba4554 ppm .00150	Be3130 ppm .07645	Bi2230 ppm .00010	Ca3179 ppm .00213	Cd2288 ppm .19025
#1	.00034	.04605	-.00484	.00169	.07626	.00013	-.00225	18.973	-.00002
#2	-.00044	.04566	.00050	.00132	.07663	.00007	-.00202	19.077	.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00041	Cu3247 ppm .00006	Fe2599 ppm .00066	K_7664 ppm .00349	Li6707 ppm .13725	Mg2790 ppm .00220	Mn2576 ppm .55020	Mo2020 ppm .00187
#1	-.00047	-.00021	.00034	.00301	.14437	.00313	.54694	.00186	-.00128
#2	-.00035	.00032	.00099	.00397	.13014	.00128	.55346	.00188	-.00079
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .62.230	P_1782 ppm .00176	Pb2203 ppm .00608	S_1820 ppm .00269	Sb2068 ppm .02922	Se1960 ppm .00383	Si2881 ppm .00290	SiO2 ppm .19688
#1	61.479	.00150	.00339	.00296	.03240	-.00436	.00314	.20121	.43058
#2	62.981	.00202	.00877	.00241	.02603	-.00330	.00265	.19255	.41205
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00021	Th2837 ppm .03308	Ti3349 ppm .00059	Tl1908 ppm .00009	U_3701 ppm .00182	V_2924 ppm .02423	Zn2062 ppm .00031	Zr3391 ppm .00080
#1	-.00084	.03280	-.00275	.00000	-.00277	-.04201	.00009	.00106	.00244
#2	.00127	.03336	.00158	-.00018	-.00087	-.00645	-.00071	.00157	-.00083
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3294.5	Y_3774 Cts/S 55609.	377.433 {89}					
#1	3296.5	55473.	5393.3						
#2	3292.4	55745.	5325.9						

Sample Name: 280-69513-a-6-i ms Acquired: 5/29/2015 0:56:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .20268 .00051 .24976	As1890 ppm .39291 .00161 .41045	B_2089 ppm .77332 .00823 1.0644	Ba4554 ppm 2.6528 .0134 .50577	Be3130 ppm .00909 .00013 1.4344	Bi2230 ppm .38330 .00031 .08078	Ca3179 ppm 102.84 .21 .20658	Cd2288 ppm .21832 .00087 .39854
#1	.20232	.39177	.77914	.19793	2.6433	.00900	.38352	102.69	.21894
#2	.20304	.39405	.76750	.19520	2.6623	.00919	.38308	102.99	.21771
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm W .94484 .09298 .00068 .73582	Cu3247 ppm .43138 .00028 .06522	Fe2599 ppm .18038 .00136 .75460	K_7664 ppm 10.720 .099 .92184	Li6707 ppm .20513 .00190 .92687	Mg2790 ppm 11.662 .028 .23745	Mn2576 ppm .10216 .00024 .23089	Mo2020 ppm .19709 .00163 .82533
#1	.09346	.94791	.43118	.17942	10.651	.20379	11.642	.10232	.19824
#2	.09250	.94178	.43158	.18134	10.790	.20648	11.681	.10199	.19594
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Na8183 818.326 {41}	Ni2316 ppm 313.36 .1.40 .44720	P_1782 ppm .09741 .00048 .49340	Pb2203 ppm W 2.0533 .0143 .69451	S_1820 ppm .10448 .0019 .18573	Sb2068 ppm .53781 .00449 .83399	Se1960 ppm .10829 .00362 .3.3400	Si2881 ppm .60203 .00430 .71357	SiO2 ppm 2.8027 .0033 .11654
#1	312.37	.09775	2.0634	1.0462	.53464	.11085	.60507	2.8050	6.0028
#2	314.35	.09707	2.0433	1.0434	.54098	.10573	.59899	2.8004	5.9929
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .37926 .00312 .82224	Th2837 ppm .34762 .00212 .61019	Ti3349 ppm .19130 .00013 .06625	Tl1908 ppm .19347 .00150 .77647	U_3701 ppm .35268 .00297 .84211	V_2924 ppm .38881 .04185 10.764	Zn2062 ppm .09825 .00092 .93804	Zr3391 ppm .50168 .00016 .03194
#1	.38147	.34612	.19121	.19453	.35478	.41840	.09890	.50157	.08805
#2	.37706	.34912	.19139	.19241	.35058	.35922	.09760	.50179	.09155
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3196.2	Y_3774 Cts/S 53800.	377.433 {89}					
#1	3203.9	53744.	5364.7						
#2	3188.5	53855.	5402.5						

Sample Name: 280-69513-a-6-j msd Acquired: 5/29/2015 0:59:33 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .18913	As1890 ppm .38131	B_2089 ppm .72602	Ba4554 ppm 2.4629	Be3130 ppm .00833	Bi2230 ppm F.35541	Ca3179 ppm 95.486	Cd2288 ppm .20414
#1	.18925	.38059	.73226	.18488	2.4597	.00840	.35487	95.309	.20458
#2	.18901	.38202	.71979	.18484	2.4661	.00826	.35594	95.664	.20371
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .08727	Cu3247 ppm W.89093	Fe2599 ppm .40627	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	.08732	.89168	.40682	.17755	9.9146	.19173	11.027	.09644	.18503
#2	.08722	.89018	.40571	.17364	10.047	.19270	11.020	.09726	.18383
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 290.69	P_1782 ppm .09091	Pb2203 ppm 1.9171	S_1820 ppm .98144	Sb2068 ppm .51194	Se1960 ppm .10057	Si2881 ppm .55429	SiO2 ppm 2.6214
#1	290.75	.09100	1.9193	.98454	.51272	.10210	.55821	2.6358	5.6406
#2	290.64	.09082	1.9149	.97834	.51117	.09904	.55037	2.6070	5.5790
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .35869	Th2837 ppm 407.771 {83}	Ti3349 ppm .18080	Tl1908 ppm 190.856 {477}	U_3701 ppm 370.152 {91}	V_2924 ppm 292.402 {115}	Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	.36015	.32223	.18066	.18384	.33064	.38164	.09303	.47604	.08048
#2	.35723	.32301	.18093	.18459	.33369	.39014	.09308	.47831	.08207
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3192.6	Y_3774 Cts/S 53638.	377.433 {89}					
#1	3186.7	53866.	5423.4						
#2	3198.4	53409.	5435.3						

Sample Name: 280-69513-a-6-hPDS Acquired: 5/29/2015 1:02:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04371	.97166	.19200	.10450	.48633	.04621	-.00255	115.97	.05055
Stddev	.00038	.00133	.00220	.00014	.00417	.00012	.00377	1.20	.00036
%RSD	.87022	.13692	1.1452	.13494	.85649	.25209	147.89	1.0320	.70989
#1	.04398	.97072	.19356	.10440	.48928	.04629	-.00521	116.82	.05030
#2	.04344	.97260	.19045	.10459	.48339	.04613	.00012	115.12	.05080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04679	.04696	.05207	.90743	.21.106	.10588	.21.232	.05605	.04600
Stddev	.00036	.00040	.00016	.00650	.135	.00264	.031	.00009	.00002
%RSD	.76854	.85445	.31583	.71628	.63923	2.4887	.14765	.15867	.03708
#1	.04704	.04668	.05195	.90283	21.201	.10402	21.210	.05598	.04601
#2	.04653	.04725	.05219	.91202	21.010	.10774	21.255	.05611	.04599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	336.50	.05097	W 2.0875	.10372	.14681	.09674	.20887	5.6447	12.080
Stddev	3.14	.00058	.0006	.00217	.00064	.00214	.00021	.0057	.012
%RSD	.93314	1.1461	.02611	2.0917	.43823	2.2155	.10216	.10135	.10135
#1	338.72	.05139	2.0871	.10525	.14635	.09523	.20872	5.6407	12.071
#2	334.28	.05056	2.0879	.10218	.14726	.09826	.20902	5.6487	12.088
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09597	.21594	.19794	.04900	.17635	.45770	.05050	.22082	.04201
Stddev	.00066	.00175	.00189	.00018	.00254	.04289	.00116	.00118	.00012
%RSD	.68556	.81177	.95592	.37262	1.4398	9.3706	2.2929	.53278	.28170
#1	.09550	.21717	.19928	.04887	.17814	.42738	.04968	.21999	.04193
#2	.09643	.21470	.19660	.04913	.17455	.48803	.05132	.22166	.04209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3163.1	53092.	5324.3						
Stddev	9.3	42.	55.2						
%RSD	.29535	.08002	1.0363						
#1	3169.8	53122.	5285.3						
#2	3156.5	53062.	5363.3						

Sample Name: CCVH-3283796 Acquired: 5/29/2015 1:04:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00610	48.045	-.00270	-.00018	.00051	.00010	1.0044	.03893	-.00025	-.00060	.00049	.00321	46.804
Stddev	.00001	.424	.00104	.00093	.00015	.00001	.0030	.00178	.00008	.00028	.00011	.00066	.107
%RSD	.17149	.88265	38.623	517.87	29.047	9.1403	.29516	4.5663	31.795	47.469	23.499	20.636	.22851
#1	-.00609	48.345	-.00196	-.00084	.00040	.00009	1.0065	.03767	-.00019	-.00080	.00057	.00368	46.729
#2	-.00610	47.745	-.00344	.00048	.00061	.00011	1.0023	.04019	-.00031	-.00040	.00041	.00274	46.880

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.15728	.00344	.05074	.00141	-.00024	259.09	.00258	.00147	.00077	4.9376	-.01069	.01222	.00197
Stddev	.03037	.00057	.00357	.00006	.00005	2.48	.00015	.00014	.00037	.0246	.00071	.00713	.00362
%RSD	19.308	16.629	7.0420	4.6197	19.017	.95859	5.8985	9.6131	48.444	.49826	6.6063	58.338	183.95
#1	.17876	.00303	.05326	-.00145	-.00021	260.84	.00269	.00137	.00104	4.9550	-.01019	.00718	-.00059
#2	.13581	.00384	.04821	-.00136	-.00028	257.33	.00247	.00157	.00051	4.9202	-.01119	.01726	.00453

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00421	-.00108	.00046	4.9930	-.01360	-.00006	10.408	.00325	-.00059	-.13065
Stddev	.00774	.00126	.00002	.0098	.00017	.00071	.038	.00081	.00084	.00046
%RSD	183.95	116.47	5.0286	.19665	1.2620	1224.2	.36383	24.840	142.53	.35537
#1	-.00127	-.00019	.00047	4.9861	-.01348	-.00056	10.435	.00268	.00000	-.13033
#2	.00968	-.00198	.00044	5.0000	-.01372	.00045	10.381	.00382	-.00118	-.13098

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3229.1	53969.	5188.8
Stddev	8.1	24.	71.4
%RSD	.25189	.04378	1.3754
#1	3234.8	53986.	5138.3
#2	3223.3	53952.	5239.2

Sample Name: CCV-3290307 Acquired: 5/29/2015 1:07:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48809	.51344	.98799	.49526	.49129	.46413	-.00326	4.7588	.49443	.50127	.50736	.48976	2.2706
Stddev	.00104	.00115	.00818	.00023	.00431	.00512	.00103	.0097	.00015	.00178	.00269	.00047	.0124
%RSD	.21237	.22419	.82832	.04714	.87717	1.1039	31.488	.20360	.02942	.35557	.53081	.09651	.54517
#1	.48736	.51425	.98220	.49543	.49434	.46776	-.00398	4.7657	.49453	.50001	.50545	.48943	2.2793
#2	.48882	.51262	.99378	.49510	.48825	.46051	-.00253	4.7520	.49433	.50253	.50926	.49010	2.2618

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	51.403	1.0163	19.780	.49880	.48955	5.1580	.50015	.98835	1.0069	-.00083	.98311	.99160	4.6917
Stddev	.506	.0123	.000	.00104	.00005	.0361	.00079	.00116	.0044	.00040	.00061	.00177	.0516
%RSD	.98376	1.2135	.00006	.20879	.00991	.69948	.15716	.11720	.44035	47.981	.06181	.17805	1.0992
#1	51.761	1.0250	19.780	.49953	.48958	5.1835	.49960	.98916	1.0038	-.00111	.98268	.99285	4.6552
#2	51.046	1.0076	19.780	.49806	.48952	5.1325	.50071	.98753	1.0101	-.00055	.98354	.99035	4.7281

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.040	.99386	.48709	-.00459	.48829	1.0186	-.03589	.49638	.50963	.47877
Stddev	.110	.00289	.00539	.00037	.00120	.0022	.00362	.00388	.00187	.00110
%RSD	1.0992	.29106	1.1062	8.1647	.24504	.21602	10.096	.78083	.36730	.23047
#1	9.9621	.99182	.49090	-.00432	.48914	1.0170	-.03333	.49364	.51095	.47799
#2	10.118	.99591	.48328	-.00485	.48744	1.0201	-.03845	.49912	.50831	.47955

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3349.6	56181.	5361.0									
Stddev	.8	107.	43.5									
%RSD	.02370	.19105	.81204									
#1	3349.0	56106.	5330.2									
#2	3350.2	56257.	5391.8									

Sample Name: CCB Acquired: 5/29/2015 1:09:58 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00000	.00092	.00094	.00001	.00008	-.00337	.00327	.00015	-.00023	-.00001	-.00003
Stddev	.00016	.0003	.00005	.00103	.00004	.00004	.00160	.00048	.00025	.00005	.00002	.00035
%RSD	192.44	36801.	5.7725	110.03	327.75	53.082	47.476	14.744	169.61	23.359	329.46	1161.7
#1	-.00003	.00022	.00096	.00021	-.00002	.00005	-.00450	.00361	-.00003	-.00019	.00001	.00022
#2	.00019	-.00022	.00088	.00166	.00004	.00011	-.00224	.00293	.00033	-.00027	-.00002	-.00028

Check ?	Chk Pass											
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	.09589	.00068	.00150	-.00004	.00035	.12537	-.00014	-.00249	.00004	.00284	.00496
Stddev	.00153	.04707	.00072	.00233	.00004	.00022	.01319	.00028	.00121	.00122	.00280	.00057
%RSD	177.15	49.089	105.93	155.26	107.77	63.620	10.519	204.91	48.641	3096.4	98.752	11.597
#1	.00195	.06261	.00119	-.00015	-.00007	.00019	.13470	-.00033	-.00334	.00090	.00482	.00455
#2	-.00022	.12918	.00017	.00315	-.00001	.00051	.11604	.00006	-.00163	-.00082	.00086	.00536

Check ?	Chk Pass											
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00501	.02500	.05349	-.00046	.00012	-.00157	.00033	.00045	-.01960	-.00072	-.00030	-.00140
Stddev	.00516	.00340	.00729	.00046	.00000	.00039	.00010	.00115	.00322	.00063	.00063	.00171
%RSD	102.93	13.618	13.618	100.70	1.0277	25.138	31.063	256.39	16.410	88.005	208.52	122.17
#1	.00136	.02259	.04834	-.00079	.00012	-.00129	.00026	-.00036	-.01733	-.00117	-.00075	-.00261
#2	.00866	.02740	.05865	-.00013	.00012	-.00184	.00041	.00126	-.02188	-.00027	.00014	-.00019

Check ?	Chk Fail	Chk Pass										
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	3342.3	57064.	5344.4									
Stddev	4.1	182.	94.4									
%RSD	.12118	.31970	1.7654									
#1	3345.1	56935.	5277.6									
#2	3339.4	57193.	5411.1									

Sample Name: CCVL3296658 Acquired: 5/29/2015 1:12:22 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01042	.11119	F .00877	.10278	.01016	.00091	.10737	.19604	.00529	.01034	.01053	.01512
Stddev	.00108	.00044	.00068	.00093	.00081	.00000	.00148	.00176	.00023	.00034	.00010	.00016
%RSD	10.407	.39540	7.7099	.90643	7.9886	.42479	1.3768	.89596	4.3287	3.2546	.96514	1.0489
#1	.00965	.11150	.00829	.10212	.00958	.00091	.10842	.19479	.00513	.01010	.01060	.01501
#2	.01119	.11088	.00925	.10344	.01073	.00091	.10633	.19728	.00545	.01058	.01046	.01523

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01500	Chk Pass								
			-30.000%									

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09520	3.2662	.01235	.21674	.01058	.01925	1.1353	.04208	2.9509	.00765	-.00393	.00969
Stddev	.00006	.0170	.00132	.00087	.00008	.00018	.0076	.00020	.0021	.00170	.00418	.00085
%RSD	.05852	.52071	10.699	.40128	.77797	.91034	.66964	.46600	.06969	22.255	106.58	8.8034
#1	.09516	3.2542	.01141	.21613	.01064	.01938	1.1299	.04194	2.9523	.00645	-.00097	.01029
#2	.09523	3.2782	.01328	.21736	.01052	.01913	1.1407	.04222	2.9494	.00886	-.00688	.00908

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .01980	.49383	1.0568	.10184	.01006	.01457	.01003	.01599	.04516	.00969	.02201	.01592
Stddev	.00164	.01272	.0272	.00032	.00013	.00136	.00020	.00026	.01348	.00036	.00010	.00116
%RSD	8.2983	2.5758	2.5758	.31095	1.2968	9.3187	2.0345	1.6119	29.847	3.7586	.47042	7.2664
#1	.02096	.48484	1.0375	.10162	.00997	.01553	.00989	.01581	.05469	.00943	.02209	.01510
#2	.01864	.50282	1.0760	.10207	.01016	.01361	.01017	.01617	.03563	.00995	.02194	.01674

Check ? Value Range	Chk Fail .01500	Chk Pass										

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3426.5	58187.	5376.9
Stddev	13.9	164.	34.2
%RSD			
#1	3436.3		58071.
#2	3416.7		58303.

Sample Name: 280-69516-a-1-d Acquired: 5/29/2015 1:15:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 ppm .00053	B_2089 ppm -.00042	Ba4554 ppm .16195	Be3130 ppm .00003	Bi2230 ppm -.00275	Ca3179 ppm 1.2000	Cd2288 ppm .00313
#1	.00031	.00882	.00091	.01012	.16134	.00011	-.00016	1.1996	.00340
#2	.00075	.00884	-.00174	.00993	.16256	-.00004	-.00535	1.2003	.00286
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 ppm .00041	Fe2599 ppm W .68016	K_7664 ppm .00991	Li6707 ppm .32736	Mg2790 ppm .00316	Mn2576 ppm .06756	Mo2020 ppm .00362
#1	.00021	.67920	.00508	.01102	.31232	.00371	.06546	.00363	.00091
#2	.00060	.68112	.00487	.00880	.34240	.00261	.06966	.00361	.00106
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 ppm 338.46	Pb2203 ppm .00051	S_1820 ppm 1.1715	Sb2068 ppm .00217	Se1960 ppm .30937	Si2881 ppm .01096	SiO2 ppm .00101
#1	337.85	.00048	1.1638	.00275	.30505	.01292	.00073	.07687	.16450
#2	339.08	.00054	1.1791	.00160	.31369	.00900	.00129	.08940	.19132
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 ppm .00862	Ti3349 ppm 2.0441	Tl1908 ppm .00037	U_3701 ppm -.04567	V_2924 ppm -.00045	Zn2062 ppm 3.9618	Zr3391 ppm .00207
#1	.00840	2.0422	-.00077	.00023	.00047	-.03152	-.00093	3.9603	.00307
#2	.00884	2.0460	-.00065	.00052	.00049	-.05983	.00003	3.9633	.00108
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 Cts/S 3210.9	377.433 {89} Cts/S 53636.					
#1	3212.0	53591.	5401.2						
#2	3209.9	53681.	5417.9						

Sample Name: 280-69516-a-2-d Acquired: 5/29/2015 1:17:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00025	.03786	-.00568	.00985	.15866	.00010	-.00383	4.8287	.03896
#2	-.00001	.03834	-.00375	.00969	.16073	-.00009	-.00698	4.9761	.03809
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00060	.34412	.00732	.05410	.49820	.00539	.17141	.01383	-.00045
#2	.00004	.33733	.00741	.06145	.63787	.00335	.18199	.01402	-.00023
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	330.86	.00098	.73950	.00687	.20400	.00141	.00595	.16952	.36276
#2	340.01	.00097	.73389	.00650	.20123	.00221	.00286	.16037	.34319
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00245	.92223	-.00028	.00037	-.00366	-.04511	.00034	3.3214	.00007
#2	.00137	.94811	.00229	-.00020	.00188	-.04928	-.00086	3.3550	.00068
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3224.5	54224.	5523.4						
#2	3219.5	54111.	5392.4						

Sample Name: 280-69327-a-1-e Acquired: 5/29/2015 1:20:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00042	As1890 ppm .00564	B_2089 ppm .00431	Ba4554 ppm .00664	Be3130 ppm .04708	Bi2230 ppm .00011	Ca3179 ppm .00522	Cd2288 ppm .18878	
#1	-.00066	.00590	-.00576	.00686	.04726	.00008	-.00628	1.8913	.01167	
#2	-.00019	.00538	-.00287	.00642	.04690	.00013	-.00416	1.8842	.01179	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00090	Cu3247 ppm .00026	Fe2599 ppm .00309	K_7664 ppm .00684	Li6707 ppm .23720	Mg2790 ppm .00422	Mn2576 ppm .03606	Mo2020 ppm .00097	
#1	-.00104	.00016	.00275	.00749	.24934	.00598	.03628	.00091	-.00013	
#2	-.00076	.00036	.00342	.00619	.22507	.00246	.03584	.00103	-.00002	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 333.35	P_1782 ppm .00124	Pb2203 ppm .10246	S_1820 ppm -.00059	Sb2068 ppm .02303	Se1960 ppm -.00022	Si2881 ppm .00327	SiO2 ppm .03717	
#1	334.57	.00169	.10118	-.00066	.02618	-.00048	.00307	.03636	.07782	
#2	332.13	.00078	.10374	-.00052	.01987	.00004	.00346	.03797	.08125	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00072	Th2837 ppm .00238	Ti3349 ppm -.00103	Tl1908 ppm .00042	U_3701 ppm -.00027	V_2924 ppm -.01057	Zn2062 ppm -.00086	Zr3391 ppm .15452	
#1	.00048	.00238	-.00170	.00029	.00161	.00444	-.00085	.15343	.00266	
#2	.00097	.00238	-.00037	.00055	-.00216	-.02558	-.00087	.15561	.00230	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3232.7	Y_3774 Cts/S 54027.							
#1	3225.8	54001.	5430.0							
#2	3239.6	54053.	5470.3							

Sample Name: 280-69327-b-3-e Acquired: 5/29/2015 1:23:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00019	.00857	-.00032	.03706	.08866	.00006	-.00189	3.9474	.00041
#2	.00031	.00824	-.00699	.03693	.08977	.00016	.00091	4.0236	.00028
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00070	.00049	.00899	.02611	.23022	.00478	.09733	.00178	-.00077
#2	-.00047	.00014	.00878	.03177	.27430	.00393	.10416	.00174	-.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	325.95	.00169	.15196	.00121	.02928	-.00176	.00282	.03678	.07871
#2	332.36	.00140	.15230	-.00011	.02649	.00004	.00757	.04230	.09053
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00090	.00619	-.00217	.00038	.00106	.02044	-.00158	.46191	.00038
#2	-.00001	.00620	.00124	.00015	.00126	-.03050	-.00125	.46769	.00007
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3241.4	54381.	5487.7						
#2	3227.2	54443.	5374.0						

Sample Name: 280-69327-a-5-e Acquired: 5/29/2015 1:26:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.01022	-.00340	.04110	.04389	.00003	-.00137	2.3548	.01782
Stddev	.00059	.00015	.00283	.00133	.00077	.00005	.00016	.0073	.00020
%RSD	307.70	1.4529	83.211	3.2458	1.7539	165.60	12.029	.30968	1.1344
#1	.00061	.01011	-.00541	.04204	.04335	-.00001	-.00148	2.3497	.01768
#2	-.00023	.01032	-.00140	.04016	.04443	.00007	-.00125	2.3600	.01796
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00073	.00068	.00796	.00795	.27589	.00303	.15274	.00235	-.00018
Stddev	.00026	.00007	.00015	.00000	.01015	.00076	.00102	.00002	.00012
%RSD	35.526	10.439	1.9136	.06042	3.6786	24.989	.66865	.77013	69.724
#1	-.00091	.00073	.00807	.00795	.26871	.00249	.15347	.00236	-.00009
#2	-.00055	.00063	.00785	.00794	.28307	.00356	.15202	.00233	-.00026
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	344.33	.00194	.15681	-.00059	.04300	-.00116	.00498	.03731	.07984
Stddev	2.21	.00010	.00021	.00025	.00607	.00168	.00103	.00291	.00622
%RSD	.64261	5.2155	.13121	43.015	14.118	144.81	20.633	7.7898	7.7898
#1	342.76	.00201	.15667	-.00077	.04730	.00003	.00570	.03525	.07544
#2	345.89	.00186	.15696	-.00041	.03871	-.00235	.00425	.03936	.08424
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00419	-.00015	.00003	.00029	.00172	-.00063	.15045	.00061
Stddev	.00058	.00003	.00076	.00009	.00220	.03048	.00032	.00105	.00034
%RSD	2813.1	.62123	501.94	358.34	753.21	1767.8	50.751	.69797	56.010
#1	.00043	.00421	-.00069	.00009	-.00127	.02328	-.00041	.15119	.00037
#2	-.00039	.00417	.00039	-.00004	.00185	-.01983	-.00086	.14970	.00085
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	3202.2	54146.	5449.2						
Stddev	6.1	18.	17.2						
%RSD	.19011	.03275	.31599						
#1	3206.5	54134.	5461.4						
#2	3197.9	54159.	5437.0						

Sample Name: 280-69327-a-7-e Acquired: 5/29/2015 1:28:50 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00638	-.00661	.06904	.06901	-.00007	-.00465	5.3284	.04234
Stddev	.00017	.00016	.00072	.00018	.00051	.00005	.00335	.0115	.00002
%RSD	46.296	2.5222	10.864	.25907	.73202	79.937	72.147	.21580	.03589
#1	.00049	.00650	-.00712	.06892	.06937	-.00011	-.00702	5.3366	.04235
#2	.00025	.00627	-.00611	.06917	.06865	-.00003	-.00228	5.3203	.04233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00086	.00056	.11424	.00443	.30121	.00445	.13938	.00561	-.00043
Stddev	.00004	.00009	.00076	.00012	.09729	.00133	.00438	.00003	.00019
%RSD	5.1562	15.329	.66457	2.6932	32.298	30.009	3.1407	.51304	44.355
#1	-.00083	.00062	.11477	.00451	.23242	.00539	.13629	.00559	-.00029
#2	-.00089	.00050	.11370	.00434	.37001	.00350	.14248	.00563	-.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	349.44	.00612	.17294	.00133	.04145	.00271	.00253	.05286	.11312
Stddev	.51	.00011	.00607	.00320	.00396	.00044	.00275	.00154	.00330
%RSD	.14620	1.8743	3.5090	241.57	9.5659	16.050	108.58	2.9199	2.9199
#1	349.80	.00620	.17723	.00359	.03865	.00302	.00059	.05177	.11078
#2	349.08	.00604	.16865	-.00094	.04425	.00241	.00448	.05395	.11545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00079	.00554	.00129	.00032	.00044	-.02885	-.00082	.29582	.00110
Stddev	.00073	.00012	.00038	.00002	.00059	.01503	.00039	.00003	.00253
%RSD	92.245	2.0759	29.155	4.8197	136.18	52.107	48.253	.01050	229.54
#1	.00028	.00563	.00155	.00033	.00086	-.01822	-.00054	.29579	-.00069
#2	.00131	.00546	.00102	.00031	.00002	-.03948	-.00110	.29584	.00289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3230.7	54113.	5426.1						
Stddev	12.7	56.	44.8						
%RSD	.39322	.10354	.82606						
#1	3221.8	54073.	5394.4						
#2	3239.7	54152.	5457.8						

Sample Name: 280-69327-a-9-e Acquired: 5/29/2015 1:31:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00068	.00677	-.00265	.03321	.09590	.00020	-.00139	3.9695	.00048
#2	.00032	.00728	-.00295	.03284	.09688	.00008	-.00307	4.0779	.00068
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00066	-.00013	.00392	.11970	.29430	.00308	.11482	.00201	-.00058
#2	-.00117	.00035	.00373	.12640	.27584	.00330	.10674	.00213	-.00039
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	332.94	.00279	.15186	.00214	.07117	.00190	-.00063	.03569	.07638
#2	337.08	.00286	.14517	.00240	.06613	.00055	-.00123	.04407	.09431
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00189	.00360	-.00007	.00022	.00196	-.02766	-.00054	.24395	-.00037
#2	-.00041	.00374	.00257	.00020	.00119	-.04672	-.00050	.24215	.00293
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3262.5	54579.	5489.2						
#2	3267.3	54619.	5393.6						

Sample Name: 280-69488-c-1-j Acquired: 5/29/2015 1:34:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010c TCLP Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00020	.04947	.00222	.05883	.01938	.00010	-.00466	10.812	.00030
#2	-.00009	.04923	-.00243	.05946	.01892	-.00001	-.00123	10.717	-.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00061	.00034	.00429	.04688	6.2831	.00442	4.1487	.03373	-.00072
#2	-.00082	.00063	.00333	.04724	.00026	.0174	.00011	.00044	.00062
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	324.18	.00324	W 10.977	.00226	1.3694	.00051	.00639	.19791	.42353
#2	2.57	.00007	.002	.00153	.0110	.00073	.00106	.00456	.00976
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00119	.15456	-.00024	.00023	-.00001	-.00798	-.00060	.08675	.00200
#2	.00128	.00097	.00113	.00017	.00152	.03242	.00045	.00096	.00132
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3266.5	54949.	5504.7						
#2	3255.5	54819.	5571.7						

Sample Name: CCVH-3283796 Acquired: 5/29/2015 1:37:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00639	47.509	-.00366	-.00010	.00055	.00020	1.0204	.03210	-.00047	-.00084	.00055	.00310	46.695
Stddev	.00020	.079	.00012	.00097	.00032	.00003	.0082	.00227	.00003	.00021	.00000	.00031	.156
%RSD	3.0632	.16687	3.3438	1009.2	58.531	12.864	.80777	7.0822	5.6162	25.252	.23687	10.117	.33491
#1	-.00626	47.453	-.00358	-.00078	.00032	.00021	1.0262	.03049	-.00049	-.00069	.00055	.00333	46.585
#2	-.00653	47.566	-.00375	.00059	.00078	.00018	1.0146	.03370	-.00045	-.00099	.00055	.00288	46.806
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.10736	.00343	.04449	-.00152	-.00050	258.52	.00241	.00301	-.00054	5.0382	-.01193	.01352	.01487
Stddev	.07579	.00178	.00300	.00020	.00009	.08	.00071	.00125	.00294	.0163	.00008	.00033	.00973
%RSD	70.592	51.826	6.7515	13.379	18.661	.03136	29.612	41.575	548.59	.32334	.63833	2.4087	65.473
#1	.05377	.00469	.04236	-.00138	-.00043	258.46	.00190	.00213	-.00262	5.0497	-.01199	.01329	.00798
#2	.16095	.00217	.04661	-.00167	-.00056	258.58	.00291	.00390	.00154	5.0266	-.01188	.01375	.02175
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.03182	-.00286	.00033	4.9856	-.01372	-.00047	10.367	.00347	-.00079	-.12590			
Stddev	.02083	.00106	.00004	.0265	.00044	.00164	.091	.00081	.00095	.00065			
%RSD	65.473	36.943	11.470	.53050	3.2263	352.83	.87745	23.201	120.92	.51555			
#1	.01709	-.00211	.00030	4.9669	-.01341	.00070	10.303	.00404	-.00011	-.12636			
#2	.04655	-.00360	.00035	5.0043	-.01403	-.00163	10.431	.00290	-.00146	-.12544			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3321.6	55607.	5464.9										
Stddev	1.2	370.	4.2										
%RSD	.03680	.66549	.07713										
#1	3320.8	55869.	5461.9										
#2	3322.5	55346.	5467.9										

Sample Name: CCV-3290307 Acquired: 5/29/2015 1:39:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49403	.53868	.98474	.49510	.49694	.46569	-.00190	4.8088	.49590	.50327	.51436	.49353	2.2850
Stddev	.00103	.00073	.00169	.00257	.00275	.00500	.00166	.0536	.00016	.00422	.00184	.00244	.0126
%RSD	.20904	.13531	.17152	.51939	.55315	1.0730	87.808	1.1139	.03144	.83932	.35750	.49464	.55196
#1	.49330	.53817	.98594	.49691	.49500	.46216	-.00072	4.7709	.49601	.50625	.51566	.49180	2.2761
#2	.49476	.53920	.98355	.49328	.49889	.46922	-.00307	4.8467	.49579	.50028	.51306	.49525	2.2939

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.896	1.0215	19.854	.49962	.49144	5.2689	.50291	.99012	1.0135	.00619	.98565	.99560	4.7175
Stddev	.492	.0138	.030	.00192	.00315	.0441	.00322	.00407	.0113	.00236	.00814	.01209	.0848
%RSD	.94848	1.3475	.15096	.38478	.64048	.83715	.63965	.41144	1.1183	38.071	.82547	1.2139	1.7986
#1	51.548	1.0118	19.833	.49826	.49366	5.2377	.50518	.99300	1.0215	.00452	.99140	1.0041	4.6575
#2	52.244	1.0313	19.875	.50098	.48921	5.3001	.50063	.98724	1.0055	.00786	.97990	.98705	4.7775

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.095	.99620	.49127	-.00470	.49039	1.0167	-.00616	.49837	.50512	.48454			
Stddev	.182	.01005	.00424	.00261	.00246	.0067	.02541	.00280	.00068	.00590			
%RSD	1.7986	1.0084	.86257	55.604	.50069	.66160	412.75	.56128	.13408	1.2170			
#1	9.9670	1.0033	.48827	-.00655	.48865	1.0215	.01181	.50035	.50465	.48037			
#2	10.224	.98910	.49426	-.00285	.49213	1.0120	-.02412	.49639	.50560	.48871			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3388.8	57139.	5419.5										
Stddev	4.0	10.	73.9										
%RSD	.11766	.01689	1.3628										
#1	3386.0	57132.	5471.7										
#2	3391.6	57146.	5367.3										

Sample Name: CCB Acquired: 5/29/2015 1:42:14 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00099	.00074	-.00121	.00028	-.00027	.00014	-.00331	.00499	-.00006	-.00019	-.00020	-.00021
Stddev	.00060	.00005	.00296	.00046	.00003	.00016	.00077	.00248	.00005	.00007	.00031	.00019
%RSD	60.929	7.0342	245.26	165.81	11.697	114.03	23.399	49.569	91.027	35.348	153.28	86.213
#1	.00056	.00070	.00089	.00061	-.00025	.00025	-.00276	.00675	-.00002	-.00024	.00002	-.00008
#2	.00142	.00077	-.00330	-.00005	-.00029	.00003	-.00386	.00324	-.00010	-.00014	-.00041	-.00035
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	-.00029	.10218	.00110	.00375	.00003	.00031	.18164	.00040	-.00105	-.00093	-.00302	.00154
Stddev	.00187	.04794	.00123	.00133	.00003	.00013	.00230	.00028	.00166	.00094	.00085	.00225
%RSD	645.17	46.921	112.41	35.567	74.642	42.161	1.2653	69.960	158.77	100.90	28.290	146.18
#1	-.00161	.13608	.00023	.00469	.00005	.00022	.18327	.00060	-.00222	-.00160	-.00362	.00313
#2	.00103	.06828	.00197	.00281	.00002	.00041	.18002	.00020	.00013	-.00027	-.00242	-.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00619	.01164	.02491	-.00014	.00006	.00092	.00027	.00121	-.02759	-.00002	.00003	.00194
Stddev	.00302	.00592	.01266	.00002	.00004	.00136	.00020	.00016	.01257	.00047	.00001	.00197
%RSD	48.764	50.835	50.835	13.021	64.889	147.50	73.306	13.386	45.547	2130.9	45.779	101.69
#1	.00405	.00746	.01596	-.00015	.00008	.00188	.00013	.00133	-.03648	-.00035	.00004	.00054
#2	.00832	.01583	.03387	-.00013	.00003	-.00004	.00042	.00110	-.01871	.00031	.00002	.00333
Check ? High Limit Low Limit	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3373.9	57595.	5397.7									
Stddev	.6	150.	25.7									
%RSD	.01727	.25988	.47564									
#1	3374.4	57489.	5415.8									
#2	3373.5	57700.	5379.5									

Sample Name: CCVL3296658 Acquired: 5/29/2015 1:44:36 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.01032	.10714	.01460	.10209	.00985	.00119	.10662	.19502	.00510	.01060	.01092	.01566	.09081
Stddev	.00008	.00001	.00038	.00112	.00013	.00009	.00214	.00122	.00006	.00001	.00007	.00001	.00218
%RSD	.72705	.00645	2.5778	1.0961	1.3073	7.4342	2.0106	.62462	1.1960	.13007	.61610	.05647	2.4032
#1	.01037	.10714	.01434	.10289	.00994	.00113	.10814	.19416	.00506	.01061	.01097	.01565	.08927
#2	.01027	.10713	.01487	.10130	.00976	.00125	.10510	.19588	.00514	.01059	.01087	.01567	.09236

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	3.2290	.01246	.21416	.01049	.02002	1.1867	.04216	2.9594	.00903	-.00304	.01033	.01708	.49266
Stddev	.0445	.00178	.00054	.00008	.00030	.0061	.00010	.0018	.00032	.00117	.00251	.00006	.01578
%RSD	1.3769	14.291	.25329	.79962	1.5065	.51088	.23598	.05988	3.5348	38.340	24.248	.32877	3.2033
#1	3.2605	.01372	.21378	.01043	.02024	1.1910	.04209	2.9606	.00926	-.00387	.01210	.01704	.48150
#2	3.1976	.01120	.21454	.01054	.01981	1.1824	.04223	2.9581	.00880	-.00222	.00856	.01712	.50381

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0543	.10351	.01002	.01606	.00984	.01818	.04950	.00971	.02178	.01454
Stddev	.0338	.00265	.00013	.00206	.00026	.00010	.00405	.00036	.00026	.00252
%RSD	3.2033	2.5633	1.2751	12.828	2.6589	.56370	8.1907	3.7419	1.1805	17.300
#1	1.0304	.10538	.00993	.01752	.00966	.01811	.05236	.00996	.02196	.01632
#2	1.0782	.10163	.01011	.01460	.01003	.01825	.04663	.00945	.02160	.01276

Check ? Value Range	Chk Pass									
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3459.2	58657.	5504.5										
Stddev	5.5	79.	48.5										
%RSD	.15776	.13537	.88072										
#1	3463.0	58601.	5470.2										
#2	3455.3	58713.	5538.8										

Sample Name: mb 280-279308/1-a Acquired: 5/29/2015 1:47:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00023	As1890 ppm .00109	B_2089 ppm .00155	Ba4554 ppm .00066	Be3130 ppm .00010	Bi2230 ppm .00373	Ca3179 ppm .09676	Cd2288 ppm .00013
#1	-.00004	.00120	.00352	-.00068	.00063	.00012	-.00413	.09239	.00019
#2	-.00043	.00099	-.00663	.00028	.00070	.00007	-.00333	.10113	.00006
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00004	Cu3247 ppm -.00006	Fe2599 ppm .00171	K_7664 ppm .01076	Li6707 ppm .07353	Mg2790 ppm .00228	Mn2576 ppm .00362	Mo2020 ppm .00022
#1	-.00005	-.00022	.00151	.00884	.07545	.00191	.00642	.00026	-.00001
#2	.00012	.00010	.00191	.01268	.07161	.00265	.00082	.00019	-.00045
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .12361	P_1782 ppm .00045	Pb2203 ppm .00012	S_1820 ppm -.00092	Sb2068 ppm .00679	Se1960 ppm .00053	Si2881 ppm -.00084	SiO2 ppm .04400
#1	.13011	.00083	.00118	-.00324	.00615	.00304	.00291	.03807	.08146
#2	.11712	.00007	-.00094	.00141	.00743	-.00197	-.00459	.04994	.10687
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00044	Th2837 ppm .00025	Ti3349 ppm -.00136	Tl1908 ppm .00052	U_3701 ppm .00038	V_2924 ppm .00001	Zn2062 ppm -.00027	Zr3391 ppm .00051
#1	.00026	.00013	.00080	.00008	.00073	.00983	.00024	.00041	.00048
#2	58.676	53.534	58.541	15.738	192.07	78699.	87.302	81.211	23.606
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3410.2	Y_3774 Cts/S 58026.	377.433 {89}					
#1	3415.1	58129.	5422.0						
#2	3405.4	57923.	5494.1						

Sample Name: Ics 280-279308/2-a Acquired: 5/29/2015 1:49:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04603	As1890 ppm 1.9761	B_2089 ppm .99593	Ba4554 ppm 1.0180	Be3130 ppm 2.0387	Bi2230 ppm .04798	Ca3179 ppm 2.0216	Cd2288 ppm 47.838
#1	.04638	1.9797	.99056	1.0130	2.0286	.04791	2.0105	47.597	.10129
#2	.04567	1.9726	1.0013	1.0230	2.0487	.04804	2.0327	48.079	.10220
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .49919	Cu3247 ppm F .20223	Fe2599 ppm .25436	K_7664 ppm .91844	Li6707 ppm 53.333	Mg2790 ppm 1.0473	Mn2576 ppm 50.125	Mo2020 ppm .50395
#1	.49727	.20181	.25514	.90929	53.045	1.0428	50.196	.50443	1.0402
#2	.50111	.20266	.25357	.92758	53.621	1.0518	50.055	.50346	1.0516
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 54.978	P_1782 ppm .49628	Pb2203 ppm 10.337	S_1820 ppm .51006	Sb2068 ppm 2.0703	Se1960 ppm .51666	Si2881 ppm 2.0491	SiO2 ppm 9.6113
#1	54.504	.49349	10.289	.50651	2.0535	.51139	2.0339	9.5597	20.458
#2	55.453	.49908	10.385	.51361	2.0871	.52193	2.0642	9.6629	20.679
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.0336	Th2837 ppm 1.0040	Ti3349 ppm 1.0082	Tl1908 ppm 1.0050	U_3701 ppm 2.0042	V_2924 ppm 2.1290	Zn2062 ppm .50554	Zr3391 ppm .50237
#1	2.0241	.99927	1.0076	1.0043	1.9989	2.1665	.50639	.50297	.47005
#2	2.0432	1.0087	1.0087	1.0056	2.0095	2.0916	.50470	.50176	.47460
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3294.9	Y_3774 Cts/S 55866.						
#1	3297.3	55812.	5438.8						
#2	3292.5	55920.	5380.2						

Sample Name: 280-69629-m-4-d Acquired: 5/29/2015 1:52:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00157	-.00918	.14308	.00562	-.00002	-.00367	110.81	.00115
Stddev	.00007	.00097	.00075	.00155	.00018	.00006	.00161	.74	.00006
%RSD	25.711	61.661	8.1309	1.0802	3.2554	235.18	43.883	.66712	5.4640
#1	.00032	.00088	-.00971	.14198	.00575	-.00006	-.00253	111.33	.00110
#2	.00022	.00225	-.00865	.14417	.00549	.00002	-.00481	110.28	.00119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00170	.00244	.00137	.00608	21.287	.01256	152.60	.00046	-.00149
Stddev	.00005	.00028	.00019	.00055	.180	.00285	.36	.00009	.00080
%RSD	2.8611	11.299	14.029	9.0444	.84589	22.719	.23521	18.853	54.050
#1	-.00173	.00224	.00123	.00569	21.414	.01054	152.85	.00052	-.00205
#2	-.00166	.00263	.00150	.00647	21.159	.01457	152.34	.00040	-.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	499.81	.00487	.08551	-.00197	60.014	-.00078	.00791	35.582	76.146
Stddev	2.53	.00060	.00910	.00081	.206	.00308	.00016	.022	.046
%RSD	.50550	12.262	10.646	41.099	.34274	394.51	2.0144	.06059	.06059
#1	501.60	.00445	.07908	-.00140	59.869	.00140	.00780	35.598	76.179
#2	498.02	.00529	.09195	-.00255	60.160	-.00296	.00802	35.567	76.114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	1.1756	-.00259	.00039	-.00394	.00112	.01325	.00207	.00037
Stddev	.00226	.0063	.00010	.00014	.00253	.00499	.00023	.00046	.00133
%RSD	238.84	.53475	3.8936	36.081	64.169	445.91	1.7344	22.141	357.36
#1	-.00065	1.1800	-.00266	.00049	-.00572	.00465	.01342	.00240	.00132
#2	.00254	1.1711	-.00252	.00029	-.00215	-.00241	.01309	.00175	-.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3089.8	51435.	5406.9						
Stddev	17.1	87.	49.6						
%RSD	.55214	.16877	.91818						
#1	3077.8	51374.	5371.8						
#2	3101.9	51497.	5442.0						

Sample Name: 280-69629-m-4-dSD@5 Acquired: 5/29/2015 1:54:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00049	As1890 ppm .00072	B_2089 ppm .00243	Ba4554 ppm .02852	Be3130 ppm .00099	Bi2230 ppm .00010	Ca3179 ppm .00371	Cd2288 ppm 22.879
#1	.00007	-.00079	-.00360	.02876	.00104	.00009	-.00370	22.737	.00033
#2	-.00106	-.00064	-.00126	.02827	.00093	.00011	-.00373	23.021	.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00084	Cu3247 ppm .00045	Fe2599 ppm .00068	K_7664 ppm .00100	Li6707 ppm 4.3869	Mg2790 ppm .00491	Mn2576 ppm 30.137	Mo2020 ppm .00021
#1	-.00067	.00030	.00053	.00273	4.3659	.00471	30.107	.00026	-.00085
#2	-.00101	.00060	.00084	-.00073	4.4079	.00512	30.167	.00016	-.00090
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 103.67	P_1782 ppm .00201	Pb2203 ppm .01472	S_1820 ppm .00314	Sb2068 ppm 11.784	Se1960 ppm .00226	Si2881 ppm -.00086	SiO2 ppm 7.1589
#1	103.61	.00202	.01613	.00388	11.754	.00169	-.00093	7.1786	15.362
#2	103.73	.00201	.01331	.00240	11.815	.00282	-.00079	7.1392	15.278
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00133	Th2837 ppm .23994	Ti3349 ppm -.00233	Tl1908 ppm .00065	U_3701 ppm -.00210	V_2924 ppm .00743	Zn2062 ppm .00231	Zr3391 ppm .00038
#1	.00076	.23833	-.00351	.00037	-.00306	-.00266	.00244	.00056	.00202
#2	.00189	.24156	-.00115	.00092	-.00115	.01753	.00219	.00020	.00145
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3246.1	Y_3774 Cts/S 55228.	377.433 {89}					
#1	3265.6	55403.	5431.9						
#2	3226.6	55053.	5373.7						

Sample Name: 280-69629-m-4-e ms Acquired: 5/29/2015 1:57:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 W 2.5043	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.05089	1.9304	2.5018	1.0547	1.1626	2.0284	.04755	2.0581	154.50
#2	.04994	1.9302	2.5068	1.0486	1.1576	2.0379	.04777	2.0502	154.96
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}
#1	.10578	.48912	.18912	.26206	.91251	75.171	1.0804	200.93	.50896
#2	.10604	.48967	.18879	.25918	.91884	75.783	1.0865	200.93	.50984
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	1.0542	542.15	.48920	11.019	.48631	60.879	.54150	2.1597	43.092
#2	1.0537	543.92	.48833	10.985	.48513	60.702	.53970	2.1376	43.143
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	92.217	2.0373	2.1537	1.0419	1.0288	1.8571	2.0598	.53604	.51107
#2	92.327	2.0422	2.1640	1.0318	1.0293	1.8699	2.1355	.53144	.50978
Check ? High Limit Low Limit	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.47032								
#2	.46787								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69629-m-4-e.ms Acquired: 5/29/2015 1:57:29 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279308 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3032.5	51140.	5324.2
Stddev	10.4	115.	7.1
%RSD	.34301	.22508	.13380
#1	3039.9	51059.	5329.3
#2	3025.2	51222.	5319.2

Sample Name: 280-69629-m-4-f msd Acquired: 5/29/2015 1:59:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04948	1.9208	W 2.4670	1.0514	1.1617	2.0357	.04721	F 2.0471	154.90
Stddev	.00005	.0024	.0300	.0010	.0049	.0197	.00074	.0061	1.66
%RSD	.10600	.12542	1.2139	.09438	.42540	.96737	1.5631	.29889	1.0738
#1	.04952	1.9225	2.4881	1.0507	1.1652	2.0496	.04773	2.0514	156.08
#2	.04945	1.9191	2.4458	1.0521	1.1582	2.0217	.04668	2.0427	153.72
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10601	.48769	W .18821	.26044	.90540	75.504	1.0870	200.14	.50537
Stddev	.00028	.00013	.00007	.00062	.01500	.702	.0113	.36	.00078
%RSD	.26757	.02741	.03596	.23906	1.6573	.92993	1.0355	.17896	.15415
#1	.10581	.48779	.18826	.26000	.91601	76.001	1.0949	200.39	.50592
#2	.10621	.48760	.18816	.26088	.89479	75.008	1.0790	199.89	.50482
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0531	W 543.89	.48690	W 10.940	.48215	60.892	.53429	2.1311	43.167
Stddev	.0010	4.67	.00284	.021	.00091	.158	.00023	.0073	.632
%RSD	.09410	.85849	.58335	.19087	.18917	.26019	.04379	.34313	1.4638
#1	1.0524	547.19	.48489	10.925	.48280	61.004	.53412	2.1259	43.614
#2	1.0538	540.59	.48891	10.955	.48151	60.780	.53445	2.1363	42.721
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	92.378	W 2.0209	2.1601	1.0290	1.0239	1.8408	2.0959	.53054	.50226
Stddev	1.352	.0077	.0198	.0049	.0010	.0032	.0128	.00267	.00140
%RSD	1.4638	.38286	.91556	.47282	.09872	.17470	.61204	.50419	.27963
#1	93.335	2.0154	2.1741	1.0325	1.0246	1.8385	2.0868	.53243	.50127
#2	91.422	2.0264	2.1461	1.0256	1.0232	1.8431	2.1050	.52865	.50326
Check ?	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.47394								
Stddev	.00134								
%RSD	.28198								
#1	.47299								
#2	.47488								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69629-m-4-f msd Acquired: 5/29/2015 1:59:59 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279308 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3039.8	51282.	5297.8
Stddev	2.8	73.	62.4
%RSD	.09132	.14317	1.1778
#1	3041.8	51334.	5253.6
#2	3037.9	51231.	5341.9

Sample Name: CCVH-3283796 Acquired: 5/29/2015 2:02:29 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00576	47.707	-.00348	.00210	.00063	.00021	1.0094	.03807	-.00018	-.00067	.00051	.00315	47.077
Stddev	.00022	.773	.00153	.00089	.00037	.00007	.0036	.00404	.00025	.00029	.00026	.00038	.689
%RSD	3.8674	1.6199	44.049	42.149	58.210	34.508	.36059	10.607	142.46	44.191	50.631	12.061	1.4630
#1	-.00560	47.160	-.00457	.00148	.00037	.00026	1.0120	.03521	-.00036	-.00046	.00033	.00342	46.590
#2	-.00592	48.253	-.00240	.00273	.00089	.00016	1.0068	.04093	.00000	-.00087	.00069	.00288	47.564

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.22319	.00523	.05021	-.00146	.00031	262.10	.00229	.00241	.00109	5.0146	-.01216	.01034	.01255
Stddev	.01738	.00017	.00466	.00007	.00011	4.05	.00001	.00108	.00257	.0136	.00087	.00416	.00637
%RSD	7.7867	3.2184	9.2776	4.6531	34.272	1.5452	.55676	44.718	235.52	.27029	7.1428	40.205	50.727
#1	.21090	.00535	.05350	-.00141	.00039	259.24	.00230	.00165	.00291	5.0241	-.01277	.00740	.01705
#2	.23548	.00511	.04691	-.00151	.00024	264.96	.00228	.00317	-.00073	5.0050	-.01155	.01328	.00805

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.02686	-.00171	.00051	4.9749	-.01425	.00269	10.330	.00303	-.00038	-.12374
Stddev	.01362	.00066	.00007	.0415	.00020	.00142	.046	.00012	.00015	.00156
%RSD	50.727	38.540	14.480	.83399	1.4359	52.702	.44416	3.8702	39.479	1.2570
#1	.03649	-.00124	.00057	4.9455	-.01440	.00369	10.297	.00295	-.00027	-.12264
#2	.01722	-.00217	.00046	5.0042	-.01411	.00169	10.362	.00311	-.00049	-.12484

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3288.0	54922.	5309.2
Stddev	16.3	392.	49.2
%RSD	.49696	.71315	.92733
#1	3276.5	55199.	5344.1
#2	3299.6	54645.	5274.4

Sample Name: CCV-3290307 Acquired: 5/29/2015 2:05:06 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.49051	.51438	.98215	.49504	.49158	.46035	-.00268	4.7343	.49675	.50290	.50793	.49396
Stddev	.00020	.00188	.00104	.00315	.00207	.00076	.00128	.0151	.00119	.00281	.00080	.00118
%RSD	.04086	.36599	.10579	.63639	.42055	.16523	47.915	.31958	.23880	.55844	.15842	.23989

#1	.49066	.51304	.98142	.49281	.49304	.46089	-.00177	4.7450	.49759	.50091	.50736	.49313
#2	.49037	.51571	.98289	.49727	.49012	.45981	-.00358	4.7236	.49591	.50488	.50850	.49480

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	F 2.2288	51.436	1.0191	19.796	.49868	.49052	5.2496	.50133	.98489	1.0068	-.00002	.98398
Stddev	.0017	.028	.0001	.089	.00103	.00116	.0412	.00229	.00373	.0035	.00355	.00071
%RSD	.07527	.05458	.00873	.44797	.20579	.23670	.78462	.45630	.37833	.34454	16604.	.07262

#1	2.2276	51.416	1.0192	19.733	.49795	.48970	5.2787	.49971	.98226	1.0044	-.00253	.98348
#2	2.2300	51.456	1.0191	19.859	.49941	.49134	5.2204	.50294	.98753	1.0093	.00249	.98449

Check ? Value Range	Chk Fail 2.5000	Chk Pass	None	Chk Pass								
-10.490%												

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.99199	4.7407	10.145	.99247	.48604	-.00446	.48979	1.0142	-.04143	.49353	.49868	.47842
Stddev	.00638	.0103	.022	.00245	.00184	.00144	.00085	.0017	.05610	.00105	.00045	.00291
%RSD	.64273	.21685	.21685	.24654	.37800	32.296	.17352	.16884	135.40	.21190	.09061	.60856

#1	.98749	4.7335	10.130	.99074	.48734	-.00548	.48919	1.0130	-.00176	.49279	.49836	.47636
#2	.99650	4.7480	10.161	.99420	.48474	-.00344	.49039	1.0154	-.08110	.49426	.49899	.48048

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3348.5	56898.	5423.3									
Stddev	5.4	231.	33.6									
%RSD	.16187	.40576	.62002									

#1	3352.3	57061.	5399.5									
#2	3344.6	56734.	5447.1									

Sample Name: CCB Acquired: 5/29/2015 2:07:35 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00051	-.00042	-.00387	.00129	-.00018	.00007	-.00713	.00254	.00010	-.00033	-.00004	.00019	-.00180
Stddev	.00007	.00030	.00366	.00094	.00007	.00002	.00023	.00161	.00019	.00031	.00015	.00011	.00281
%RSD	14.148	71.281	94.366	73.258	39.963	27.167	3.1652	63.636	192.03	95.138	389.11	60.328	156.69
#1	.00056	-.00021	-.00129	.00195	-.00013	.00008	-.00697	.00140	.00023	-.00011	.00007	.00011	-.00378
#2	.00046	-.00063	-.00646	.00062	-.00024	.00006	-.00729	.00368	-.00004	-.00055	-.00015	.00027	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.10217	.00085	.00162	.00002	.00024	.21647	.00025	-.00144	-.00110	-.00121	.00453	.00016	.02910
Stddev	.01536	.00087	.00619	.00002	.00006	.00537	.00045	.00216	.00250	.00326	.00160	.00416	.00491
%RSD	15.035	102.25	381.93	111.28	24.547	2.4793	180.91	150.23	227.88	268.58	35.353	2640.5	16.889
#1	.11303	.00147	.00600	.00004	.00020	.22026	.00057	.00009	-.00286	.00109	.00340	-.00279	.03257
#2	.09131	.00024	-.00276	.00000	.00028	.21267	-.00007	-.00297	.00067	-.00351	.00567	.00310	.02562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.06227	-.00005	.00001	.00105	-.00019	.00202	-.02506	-.00070	-.00006	.00114			
Stddev	.01052	.00020	.00002	.00081	.00029	.00075	.06008	.00050	.00031	.00086			
%RSD	16.889	419.63	172.41	77.697	154.10	37.076	239.75	71.212	563.27	75.495			
#1	.06971	.00010	.00002	.00047	.00002	.00255	-.06754	-.00105	-.00028	.00174			
#2	.05484	-.00019	.00000	.00162	-.00040	.00149	.01742	-.00035	.00017	.00053			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3337.6	57603.	5309.2										
Stddev	.2	83.	20.6										
%RSD	.00634	.14475	.38868										
#1	3337.8	57544.	5323.8										
#2	3337.5	57662.	5294.6										

Sample Name: CCVL3296658 Acquired: 5/29/2015 2:09:58 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	
Units	ppm														
Avg	.01043	.10689	.01202	.10222	.01023	.00100	.10787	.19180	.00534	.01043	.01056	.01534	.09042	3.3025	
Stddev	.00032	.00041	.00570	.00097	.00007	.00005	.00082	.00400	.00037	.00010	.00033	.00044	.00173	.0303	
%RSD	3.0966	.38173	47.457	.94463	.64814	4.6003	.76163	2.0862	6.8341	.94638	3.1022	2.8610	1.9139	.91635	
#1		.01020	.10661	.01605	.10153	.01018	.00097	.10729	.18897	.00508	.01036	.01033	.01565	.08920	3.2811
#2		.01065	.10718	.00798	.10290	.01027	.00103	.10846	.19463	.00560	.01050	.01079	.01503	.09164	3.3239

Check ? Chk Pass
Value Range

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	
Units	ppm														
Avg	.01250	.21766	.01044	.01955	1.2362	.04192	2.9302	.00819	.00231	.00968	.01841	.47572	1.0180	.10299	
Stddev	.00080	.00263	.00004	.00006	.0124	.00002	.0088	.00072	.00007	.00035	.00152	.01372	.0294	.00094	
%RSD	6.4017	1.2103	.38779	.29602	1.0052	.04665	.30092	8.7806	3.1176	3.5909	8.2575	2.8839	2.8839	.91058	
#1		.01193	.21953	.01041	.01951	1.2274	.04193	2.9240	.00870	.00236	.00943	.01949	.46602	.99728	.10365
#2		.01306	.21580	.01047	.01959	1.2450	.04191	2.9364	.00768	.00226	.00992	.01734	.48542	1.0388	.10233

Check ? Chk Pass
Value Range

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm								
Avg	.01009	.01391	.00991	.01665	.05349	.00953	.02185	.01508	
Stddev	.00021	.00165	.00009	.00147	.02617	.00042	.00035	.00031	
%RSD	2.1037	11.869	.94328	8.8346	48.933	4.3810	1.6244	2.0883	
#1		.00994	.01274	.00997	.01769	.07200	.00923	.02160	.01530
#2		.01024	.01508	.00984	.01561	.03498	.00982	.02210	.01486

Check ? Chk Pass
Value Range

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	3437.8	58653.	5471.5
Stddev	16.9	81.	9.4
%RSD	.49022	.13755	.17154
#1	3449.7	58710.	5464.8
#2	3425.9	58596.	5478.1

Sample Name: 280-69607-b-1-b Acquired: 5/29/2015 2:12:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00021	6.5746	-.00322	.05230	.13292	.00035	-.00009	45.662	.00093
#2	-.00019	6.4941	-.00492	.05206	.13284	.00048	-.00585	45.469	.00097
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00071	.00972	.00499	2.9267	2.6195	.03950	2.5629	.10929	.01897
#2	.00044	.00922	.00470	2.9371	2.6921	.03816	2.5200	.10765	.01962
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	72.617	.00421	.07405	.00284	23.097	-.00030	.00242	21.317	45.618
#2	72.989	.00443	.07384	.00328	22.971	.00266	.00691	21.353	45.695
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00103	.62777	.00353	.15137	-.00523	.00019	.00474	.01382	.00161
#2	.00213	.62453	.00453	.14987	-.00267	-.01227	.00471	.01422	.00336
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3336.5	56084.	5412.6						
#2	3331.5	55951.	5451.9						

Sample Name: 280-69771-b-1-a Acquired: 5/29/2015 2:15:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00026	As1890 ppm .00430	B_2089 ppm .01042	W 11.131	Ba4554 ppm .09699	Be3130 ppm .00011	Bi2230 ppm -.00316	Ca3179 ppm 3.3951	Cd2288 ppm -.00007
#1	.00113	.00398	.01023	11.136	.09715	.00017	-.00316	3.3885	.00006	
#2	-.00060	.00462	.01060	11.127	.09683	.00006	-.00315	3.4017	-.00020	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00102	Cu3247 ppm .00002	Fe2599 ppm .00158	K_7664 ppm .02488	Li6707 ppm 1.6999	Mg2790 ppm .01063	Mn2576 ppm 1.3092	Mo2020 ppm .02391	
#1	-.00118	.00014	.00147	.02347	1.7158	.01045	1.2958	.02376	.00373	
#2	-.00086	-.00010	.00168	.02629	1.6841	.01081	1.3227	.02405	.00417	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 522.54	P_1782 ppm .00045	Pb2203 ppm .62813	S_1820 ppm -.00146	Sb2068 ppm .09859	Se1960 ppm -.00100	Si2881 ppm .00340	SiO2 ppm 4.4676	
#1	525.34	.00057	.62433	.00062	.09912	.00112	-.00358	4.4763	9.5794	
#2	519.74	.00033	.63193	-.00355	.09806	-.00311	.01039	4.4589	9.5421	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00075	Th2837 ppm .14309	Ti3349 ppm -.00045	Tl1908 ppm -.00004	U_3701 ppm .00047	V_2924 ppm -.01956	Zn2062 ppm -.00091	Zr3391 ppm .00410	
#1	.00106	.14384	-.00068	.00000	-.00065	-.01075	-.00136	.00446	.00200	
#2	.00043	.14234	-.00022	-.00007	.00159	-.02836	-.00045	.00374	.00038	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3158.9	Y_3774 Cts/S 52002.	377.433 {89}						
#1	3148.2	51868.	5128.8							
#2	3169.7	52135.	5161.1							

Sample Name: 280-69771-b-2-a Acquired: 5/29/2015 2:18:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00026	As1890 ppm .00401	B_2089 ppm .00120	Ba4554 ppm .14392	Be3130 ppm .00011	Bi2230 ppm .00247	Ca3179 ppm 80.985	Cd2288 ppm .00037
#1	-.00056	.00386	-.00276	.78865	.14257	.00024	-.00238	80.113	.00036
#2	.00003	.00417	.00516	.77886	.14528	-.00002	-.00256	81.857	.00038
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00074	Cu3247 ppm .00066	Fe2599 ppm .00126	K_7664 ppm .00943	Li6707 ppm 1.8480	Mg2790 ppm .02770	Mn2576 ppm 56.732	Mo2020 ppm .00037
#1	-.00077	.00050	.00155	.00763	1.8407	.02699	56.695	.00038	-.00078
#2	-.00072	.00082	.00097	.01123	1.8554	.02841	56.769	.00035	-.00030
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 152.30	P_1782 ppm .00455	Pb2203 ppm .01550	S_1820 ppm .00274	Sb2068 ppm 51.104	Se1960 ppm .00013	Si2881 ppm .00384	SiO2 ppm 7.5412
#1	151.01	.00439	.01403	.00208	51.111	.00201	.00143	7.4554	15.955
#2	153.59	.00471	.01697	.00339	51.097	-.00175	.00625	7.6270	16.322
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00092	Th2837 ppm 1.0112	Ti3349 ppm .00041	Tl1908 ppm -.00539	U_3701 ppm -.03587	V_2924 ppm -.00057	Zn2062 ppm .00421	Zr3391 ppm .00180
#1	.00164	1.0008	.00171	-.00013	-.00508	-.06721	-.00029	.00431	.00137
#2	.00020	1.0216	-.00090	.00036	-.00570	-.00454	-.00084	.00410	.00224
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3204.0	Y_3774 Cts/S 53919.	377.433 {89}					
#1	3209.0	53818.	5263.1						
#2	3199.1	54019.	104.0						
			142.						
			1.9763						

Sample Name: 280-69771-b-4-a Acquired: 5/29/2015 2:20:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00056	.02294	.00112	2.0109	.32087	.00014	-.00339	11.329	.00006
#2	.00093	.02272	.00097	1.9921	.31989	.00011	-.00473	11.307	.00051
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	293.90	.00203	.11640	.00023	.09175	.00236	-.00297	5.9534	12.740
#2	1.13	.00003	.00175	.00016	.00273	.00162	.00380	.0519	.111
#1	294.70	.00205	.11764	.00034	.08982	.00121	-.00565	5.9167	12.662
#2	293.09	.00200	.11516	.00012	.09368	.00351	-.00028	5.9901	12.819
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00004	.67668	.00054	.00098	.00182	-.03685	-.00135	.00208	.00089
#2	.00244	.00179	.00014	.00017	.00075	.04300	.00019	.00037	.00064
#1	.5714.6	.26481	25.979	17.042	41.384	116.68	13.868	17.588	72.419
#2	.00177	.67794	.00044	.00086	.00129	-.06725	-.00122	.00234	.00134
#1	-.00168	.67541	.00064	.00109	.00236	-.00645	-.00148	.00182	.00043
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3233.8	54193.	5389.5						
#2	3239.6	54241.	5363.3						

Sample Name: 280-69091-c-6-b Acquired: 5/29/2015 2:23:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279308 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00255	-.00238	.00751	.00006	.00014	-.00567	.00867	.00017
Stddev	.00008	.00022	.00109	.00001	.00016	.00017	.00282	.00422	.00002
%RSD	210.68	8.4385	45.768	.09093	286.77	122.29	49.744	48.662	10.432
#1	.00009	.00240	-.00161	.00751	.00017	.00025	-.00767	.01166	.00016
#2	-.00002	.00270	-.00315	.00752	-.00006	.00002	-.00368	.00569	.00019
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00019	.00023	.00394	.12219	.00301	.00534	.00010	.00009
Stddev	.00006	.00013	.00025	.00293	.04951	.00065	.00204	.00007	.00002
%RSD	45.342	70.257	107.55	74.294	40.523	21.519	38.181	70.701	26.517
#1	.00009	.00009	.00041	.00601	.08718	.00255	.00678	.00015	.00010
#2	.00017	.00028	.00006	.00187	.15720	.00346	.00390	.00005	.00007
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.39712	.00043	-.00156	.00144	.00729	.00176	.00103	.01297	.02775
Stddev	.02023	.00047	.00046	.00056	.00375	.00056	.00524	.01262	.02700
%RSD	5.0934	110.01	29.302	39.030	51.437	31.750	508.03	97.295	97.295
#1	.41143	.00009	-.00124	.00105	.00994	.00215	-.00267	.00405	.00866
#2	.38282	.00076	-.00188	.00184	.00464	.00136	.00473	.02189	.04684
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.00012	.00056	.00025	.00081	-.02300	-.00098	.00027	.00042
Stddev	.00078	.00012	.00075	.00024	.00057	.03975	.00032	.00007	.00082
%RSD	1138.0	100.88	133.65	99.014	70.299	172.83	32.352	26.931	193.46
#1	-.00062	.00020	.00109	.00042	.00041	-.05110	-.00076	.00022	-.00016
#2	.00049	.00003	.00003	.00007	.00122	.00511	-.00121	.00032	.00101
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3402.1	58212.	5380.1						
Stddev	1.7	31.	3.4						
%RSD	.05088	.05302	.06346						
#1	3400.9	58190.	5377.7						
#2	3403.4	58234.	5382.5						

Sample Name: CCVH-3283796 Acquired: 5/29/2015 2:26:01 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00621	47.128	-.00147	.00561	.00056	.00008	1.0153	.02752	-.00025	-.00071	.00050	.00354	46.441
Stddev	.00127	.021	.00020	.00051	.00031	.00003	.0027	.00322	.00007	.00049	.00034	.00006	.220
%RSD	20.396	.04543	13.435	9.1756	56.154	42.303	.27102	11.711	25.928	69.896	67.087	1.7148	.47457
#1	-.00531	47.113	-.00161	.00597	.00078	.00011	1.0172	.02524	-.00021	-.00036	.00026	.00350	46.285
#2	-.00711	47.143	-.00133	.00525	.00034	.00006	1.0134	.02980	-.00030	-.00106	.00074	.00358	46.597

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.20200	.00207	.04046	-.00142	-.00059	260.30	.00231	.00430	.00192	5.0186	-.00951	.01007	-.00179
Stddev	.05386	.00135	.00366	.00010	.00002	.64	.00027	.00140	.00135	.0266	.00196	.00130	.00856
%RSD	26.661	65.331	9.0426	6.7075	3.2028	.24582	11.631	32.499	70.056	.52963	20.614	12.884	479.50
#1	.16392	.00302	.04304	-.00149	-.00060	260.76	.00250	.00331	.00287	5.0374	-.01090	.01099	-.00784
#2	.24008	.00111	.03787	-.00135	-.00058	259.85	.00212	.00529	.00097	4.9998	-.00813	.00915	.00427

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.00382	-.00222	.00029	4.9805	-.01405	.00093	10.481	.00298	-.00132	-.12401
Stddev	.01832	.00145	.00000	.0043	.00005	.00153	.002	.00019	.00027	.00042
%RSD	479.50	65.605	.40203	.08657	.32413	165.10	.01665	6.3750	20.191	.34122
#1	-.01678	-.00325	.00029	4.9835	-.01401	.00201	10.480	.00285	-.00113	-.12431
#2	.00914	-.00119	.00029	4.9774	-.01408	-.00016	10.482	.00312	-.00151	-.12371

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3319.6	55291.	5350.2
Stddev	2.2	302.	27.4
%RSD	.06488	.54683	.51181
#1	3318.0	55078.	5369.5
#2	3321.1	55505.	5330.8

Sample Name: CCV-3290307 Acquired: 5/29/2015 2:28:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49151	.51168	.98783	.50075	.49771	.46387	-.00150	4.7743	.49518	.50451	.51196
Stddev	.00070	.00196	.00561	.00163	.00625	.00651	.00087	.0635	.00126	.00261	.00479
%RSD	.14276	.38326	.56784	.32521	1.2561	1.4035	57.862	1.3294	.25400	.51824	.93471
#1	.49101	.51306	.99179	.50190	.49329	.45926	-.00212	4.7294	.49429	.50636	.51534
#2	.49200	.51029	.98386	.49960	.50213	.46847	-.00089	4.8192	.49607	.50267	.50858
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49597	W 2.2422	52.175	1.0305	19.767	.49729	.49290	5.3043	.50360	.99176	1.0159
Stddev	.00321	.0283	.699	.0128	.031	.00068	.00264	.0703	.00182	.00866	.0065
%RSD	.64760	1.2638	1.3406	1.2461	.15777	.13670	.53478	1.3257	.36106	.87334	.63945
#1	.49370	2.2221	51.680	1.0214	19.789	.49681	.49476	5.2546	.50489	.99789	1.0205
#2	.49824	2.2622	52.669	1.0396	19.745	.49777	.49104	5.3540	.50231	.98564	1.0113
Check ?	Chk Pass	Chk Warn 2.5000 -10.000%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00086	.99285	1.0009	4.7073	10.074	.99761	.49072	-.00539	.48888	1.0193	-.01508
Stddev	.00276	.00598	.0037	.1078	.231	.00413	.00604	.00267	.00032	.0044	.06065
%RSD	320.11	.60209	.37006	2.2895	2.2895	.41448	1.2315	49.622	.06502	.42783	402.15
#1	.00109	.99708	1.0035	4.6311	9.9106	1.0005	.48644	-.00350	.48866	1.0224	-.05796
#2	-.00281	.98863	.99826	4.7835	10.237	.99469	.49499	-.00728	.48911	1.0163	.02780
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value Range											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.49231	.50035	.48551								
Stddev	.00217	.00693	.00752								
%RSD	.44163	1.3857	1.5489								
#1	.49077	.50526	.48020								
#2	.49385	.49545	.49083								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3356.3	57044.	5322.5								
Stddev	11.4	182.	41.5								
%RSD	.33973	.31990	.77976								
#1	3364.4	56915.	5351.8								
#2	3348.3	57173.	5293.1								

Sample Name: CCB Acquired: 5/29/2015 2:31:07 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	-.00024	W -.00533	.00464	-.00012	.00012	-.00311	.00471	.00014	-.00008	.00006
Stddev	.00040	.00029	.00067	.00026	.00008	.00002	.00057	.00161	.00009	.00006	.00012
%RSD	372.10	122.45	12.518	5.5190	71.397	15.199	18.306	34.099	67.651	76.839	224.24
#1	-.00018	-.00045	-.00581	.00482	-.00006	.00013	-.00352	.00585	.00007	-.00013	-.00003
#2	.00039	-.00003	-.00486	.00446	-.00018	.00010	-.00271	.00358	.00020	-.00004	.00014
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00024	.14450	.00309	-.00177	.00003	.00008	.19662	-.00010	-.00255	-.00083
Stddev	.00033	.00033	.00212	.00111	.00112	.00003	.00008	.00268	.00003	.00226	.00070
%RSD	168.19	133.52	1.4639	36.004	63.029	120.92	98.957	1.3623	31.814	88.689	84.043
#1	-.00043	.00001	.14599	.00231	-.00098	.00005	.00014	.19851	-.00012	-.00095	-.00132
#2	.00004	.00048	.14300	.00388	-.00256	.00000	.00003	.19472	-.00008	-.00415	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00294	.00213	.00310	.01810	.03873	.00058	-.00007	.00186	.00004	.00184	-.02460
Stddev	.00007	.00146	.00114	.00235	.00502	.00083	.00003	.00081	.00002	.00046	.00192
%RSD	2.3729	68.796	36.697	12.970	12.970	143.21	42.016	43.498	57.917	25.115	7.8096
#1	-.00298	.00317	.00230	.01976	.04228	.00117	-.00009	.00128	.00005	.00216	-.02595
#2	-.00289	.00109	.00391	.01644	.03518	-.00001	-.00005	.00243	.00002	.00151	-.02324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00052	-.00013	.00086								
Stddev	.00005	.00048	.00171								
%RSD	9.0724	364.09	199.85								
#1	-.00048	-.00047	.00207								
#2	-.00055	.00021	-.00035								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3328.8	56076.	5248.2								
Stddev	29.9	134.	56.7								
%RSD	.89754	.23842	1.0802								
#1	3307.7	56170.	5208.1								
#2	3350.0	55981.	5288.3								

Sample Name: CCVL3296658 Acquired: 5/29/2015 2:33:30 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.01005	.10700	.01305	.10453	.01003	.00101	.10603	.19125	.00519	.01069	.01069	.01522	.08818
Stddev	.00017	.00045	.00080	.00070	.00005	.00014	.00167	.00199	.00002	.00002	.00037	.00031	.00045
%RSD	1.7167	.41853	6.1208	.66588	.53409	13.478	1.5764	1.0384	.37840	.15370	3.4715	2.0486	.51293
#1	.01017	.10669	.01361	.10502	.00999	.00091	.10484	.18984	.00518	.01070	.01095	.01544	.08850
#2	.00992	.10732	.01248	.10404	.01006	.00110	.10721	.19265	.00521	.01068	.01042	.01499	.08786

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	3.2940	.01176	.21622	.01062	.01974	1.2030	.04258	2.9357	.00890	-.00441	.00992	.01730	.47555
Stddev	.0220	.00123	.00574	.00001	.00012	.0076	.00008	.0142	.00071	.00179	.00130	.00202	.00572
%RSD	.66878	10.486	2.6526	.05608	.62821	.63066	.19515	.48390	7.9261	40.535	13.084	11.703	1.2020
#1	3.2784	.01263	.21217	.01062	.01983	1.1976	.04263	2.9457	.00841	-.00568	.00900	.01587	.47959
#2	3.3096	.01089	.22028	.01063	.01966	1.2084	.04252	2.9256	.00940	-.00315	.01084	.01873	.47150

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0177	.10544	.01001	.01393	.01023	.01826	.05607	.00955	.02242	.01493
Stddev	.0122	.00021	.00008	.00022	.00003	.00205	.00743	.00019	.00078	.00062
%RSD	1.2020	.20250	.79957	1.5625	.27624	11.234	13.247	2.0155	3.5007	4.1231
#1	1.0263	.10529	.00995	.01409	.01025	.01971	.05082	.00969	.02298	.01536
#2	1.0090	.10559	.01007	.01378	.01021	.01681	.06132	.00941	.02187	.01449

Check ? Value Range	Chk Pass									
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3413.5	58003.	5397.1
Stddev	1.6	6.	2.5
%RSD	.04780	.01012	.04569
#1	3414.6	57999.	5395.3
#2	3412.3	58007.	5398.8

Sample Name: CCVL3296658 Acquired: 5/29/2015 2:33:30 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.01005	.10700	.01305	.10453	.01003	.00101	.10603	.19125	.00519	.01069	.01069	.01522	.08818
Stddev	.00017	.00045	.00080	.00070	.00005	.00014	.00167	.00199	.00002	.00002	.00037	.00031	.00045
%RSD	1.7167	.41853	6.1208	.66588	.53409	13.478	1.5764	1.0384	.37840	.15370	3.4715	2.0486	.51293
#1	.01017	.10669	.01361	.10502	.00999	.00091	.10484	.18984	.00518	.01070	.01095	.01544	.08850
#2	.00992	.10732	.01248	.10404	.01006	.00110	.10721	.19265	.00521	.01068	.01042	.01499	.08786

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	3.2940	.01176	.21622	.01062	.01974	1.2030	.04258	2.9357	.00890	-.00441	.00992	.01730	.47555
Stddev	.0220	.00123	.00574	.00001	.00012	.0076	.00008	.0142	.00071	.00179	.00130	.00202	.00572
%RSD	.66878	10.486	2.6526	.05608	.62821	.63066	.19515	.48390	7.9261	40.535	13.084	11.703	1.2020
#1	3.2784	.01263	.21217	.01062	.01983	1.1976	.04263	2.9457	.00841	-.00568	.00900	.01587	.47959
#2	3.3096	.01089	.22028	.01063	.01966	1.2084	.04252	2.9256	.00940	-.00315	.01084	.01873	.47150

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0177	.10544	.01001	.01393	.01023	.01826	.05607	.00955	.02242	.01493
Stddev	.0122	.00021	.00008	.00022	.00003	.00205	.00743	.00019	.00078	.00062
%RSD	1.2020	.20250	.79957	1.5625	.27624	11.234	13.247	2.0155	3.5007	4.1231
#1	1.0263	.10529	.00995	.01409	.01025	.01971	.05082	.00969	.02298	.01536
#2	1.0090	.10559	.01007	.01378	.01021	.01681	.06132	.00941	.02187	.01449

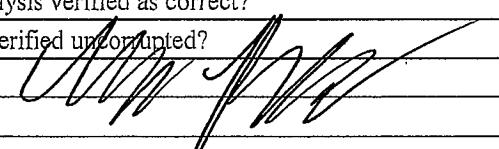
Check ? Value Range	Chk Pass												
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3413.5	58003.	5397.1										
Stddev	1.6	6.	2.5										
%RSD	.04780	.01012	.04569										
#1	3414.6	57999.	5395.3										
#2	3412.3	58007.	5398.8										

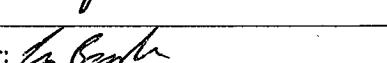
ICP Data Review Checklist

TALS BATCH NUMBER: <u>279479 - 279482</u>	Earliest due date: <u>6/3/15</u>	
Run Date: <u>5/28/15</u>	Analyst: <u>Chris Rhoades</u>	Instrument: <u>MET-025</u>
QC programs/Methods Run: <u>6010B, 6010C, 200.7</u>		

Review Items	Yes	No	N/A	2nd Level
A. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			/
2. Method blank done per prep batch and < 1/2 RL or CRDL (CLP) or < 2.2x MDL 200.7?	✓			/
3. MS run at required frequency and within limits?	✓			/
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			/
5. Serial dilution done per prep batch (or per SDG for CLP)?	✓			/
6. Post digest spike analyzed if required (CLP, DOD & AFCEE only)? NCM Whether needed for DODV3, DODV4, DODV5, AFCEE 4.0, 6010C?	✓			/
B. Calibration/Instrument Run QC				
1. ICV/CCV analyzed at appropriate frequency and within control limits? (6010B: CLP = 90 - 110%; 200.7: ICV = 95 - 105%, CCV 90-110%) If not in control, was the ICV or CCV reanalyzed twice to show return to control as per NELAP?	✓			/
2. ICB/CCB analyzed at appropriate frequency and < 1/2 RL or < 2X MDL (DOD V3, AFCEE 4.0)? Was it less than the LODV (DODV4 & DODV5)	✓			/
3. High Standard (HIGH) reanalyzed before samples and recovered within QC limits? (+-5%)	✓			/
4. RL STD run and recovered within QC limits? ($\pm 50\%$ for non-CLP, $\pm 20\%$ for DoD V3 / DoD V4 / DoD V5 / AFCEE 4.0 / USACE)	✓			/
5. Was the LLICV/LLCCV analyzed at appropriate frequency for 6010C and within control (+-30 % or +-20%)	✓			/
6. ICSA/ICSAB run at required frequency and within SOP limits? (ICSA < 2X MDL AFCEE 4.0, DOD V3 or < RL std work or < 2X RL 6010C, DOD V4, DOD V5)	✓			/
C. Sample Results				
1. For 6010B, were samples with concentrations > the linear range for any parameter diluted and reanalyzed? For 200.7, were samples with concentrations within 90% of the linear range diluted and reanalyzed?	✓			/
2. For DOD, were samples with concentrations > the daily linear range for any parameter diluted and reanalyzed?	✓			/
3. Are all reported results bracketed by in control QC?	✓			/
D. Other				
1. Are all nonconformances documented appropriately?	✓			/
2. Calculations checked for errors?	✓			/
3. Transcriptions checked for errors? (Example: Are dilution factors that are entered into the sequence log correct?)	✓			/
4. All client/project specific requirements met?	✓			/
5. Date/time of analysis verified as correct?	✓			/
6. PDF attached, verified uncorrupted?	✓			/

Analyst: Date: 5/29/15

Comments: _____

2nd Level Reviewer: Date: 5/29/15

Comments: _____

Sample Name: ICIS Acquired: 5/30/2015 11:31:50 Type: Cal
 Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-0.00068	.00057	-.00554	-.00023	.00093	.00203	-.00916	-.00197	.00498	.00024	-.00059	-.02746
Stddev	.00001	.00002	.00004	.00011	.00006	.00034	.00101	.00002	.00029	.00056	.00015	.15194
%RSD	1.9467	3.4511	.64110	47.785	6.2371	16.889	10.978	1.0583	5.8937	233.17	24.667	553.23
#1	-.00069	.00056	-.00557	-.00015	.00089	.00227	-.00845	-.00198	.00519	-.00016	-.00070	-.13491
#2	-.00067	.00059	-.00552	-.00031	.00097	.00179	-.00987	-.00195	.00477	.00064	-.00049	.07998
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00298	.00239	.00032	.00071	-.00446	.00013	.00023	-.00013	.00995	-.01900	-.00118	-.00025
Stddev	.00008	.00002	.00053	.00053	.00166	.00002	.00000	.00007	.00138	.00064	.00009	.00009
%RSD	2.5518	.84154	167.36	75.040	37.330	12.638	.33373	54.718	13.849	3.3906	7.5522	38.079
#1	.00293	.00241	.00069	.00033	-.00563	.00014	.00023	-.00018	.00898	-.01855	-.00112	-.00018
#2	.00303	.00238	-.00006	.00109	-.00328	.00012	.00023	-.00008	.01093	-.01946	-.00124	-.00031
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00082	-.00101	.00050	.00034	.00250	.00250	.00008	-.00427	-.00008	-.00031	-.00017	-.00003
Stddev	.00001	.00004	.00011	.00002	.00068	.00068	.00008	.00057	.00000	.00006	.00022	.00011
%RSD	.92613	4.3527	21.120	5.3021	27.238	27.238	97.797	13.241	5.4681	19.087	130.44	317.89
#1	-.00083	-.00105	.00057	.00035	.00202	.00202	-.00014	-.00387	-.00008	-.00035	-.00033	-.00011
#2	-.00082	-.00098	.00042	.00032	.00298	.00298	-.00002	-.00467	-.00008	-.00027	-.00001	.00004
Elem	V_2924	Zn2062	Zr3391									
Units	Cts/S	Cts/S	Cts/S									
Avg	-.00097	.00001	-.00376									
Stddev	.00005	.00001	.00040									
%RSD	4.9065	50.530	10.507									
#1	-.00093	.00001	-.00404									
#2	-.00100	.00002	-.00348									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2996.1	51543.	5898.7									
Stddev	2.0	114.	2.1									
%RSD	.06656	.22141	.03491									
#1	2994.7	51462.	5900.1									
#2	2997.5	51623.	5897.2									

Sample Name: ICAL1 Acquired: 5/30/2015 11:34:14 Type: Cal
 Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.20951	.24051	.08974	.28614	5.1797	6.9187	1.7910	1.8045	.93599	2886.7	.32305	.80255	3.7433
Stddev	.00019	.00008	.00009	.00036	.0036	.0045	.0004	.0003	.00097	2.2	.00020	.00413	.0037
%RSD	.09101	.03451	.10066	.12498	.07029	.06456	.02473	.01594	.10365	.07449	.06269	.51463	.09753
#1	.20964	.24057	.08967	.28589	5.1771	6.9155	1.7907	1.8047	.93530	2885.1	.32319	.79963	3.7407
#2	.20937	.24046	.08980	.28640	5.1823	6.9218	1.7913	1.8043	.93668	2888.2	.32290	.80547	3.7459
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.2230	.74235	1.0400	.48305	1.6314	.73304	.09906	.47082	.19461	.08145	.29562	.29562	.21722
Stddev	.0037	.00204	.0006	.00238	.0050	.00470	.00023	.00152	.00070	.00018	.00225	.00225	.00035
%RSD	.16404	.27489	.05549	.49214	.30489	.64072	.23100	.32283	.36159	.22222	.76048	.76048	.16202
#1	2.2256	.74379	1.0404	.48473	1.6279	.73637	.09890	.47189	.19511	.08158	.29403	.29403	.21747
#2	2.2204	.74091	1.0396	.48137	1.6350	.72972	.09922	.46974	.19411	.08132	.29721	.29721	.21698
Elem	Sr4077	Ti3349	TI1908	V_2924	Zn2062	Zr3391							
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S							
Avg	10.188	.28738	.17496	.17022	.01953	.36888							
Stddev	.005	.00048	.00000	.00002	.00005	.00111							
%RSD	.04816	.16831	.00059	.01182	.27881	.30210							
#1	10.185	.28772	.17496	.17024	.01957	.36967							
#2	10.192	.28703	.17495	.17021	.01949	.36809							
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3022.6	51360.	5988.1										
Stddev	5.5	159.	34.5										
%RSD	.18225	.31021	.57631										
#1	3018.7	51247.	6012.5										
#2	3026.5	51472.	5963.7										

Sample Name: ICAL2 Acquired: 5/30/2015 11:36:41 Type: Cal
Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.3173	.31797	.69856	2.2771	.28616	.47662	.12689
Stddev	.0060	.00332	.00070	.0025	.00186	.00056	.00064
%RSD	.18099	1.0431	.10088	.10873	.65169	.11762	.50170
#1	3.3130	.32032	.69906	2.2789	.28748	.47702	.12734
#2	3.3215	.31563	.69806	2.2754	.28484	.47622	.12644
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	3048.6	50746.	5969.4				
Stddev	21.7	39.	18.0				
%RSD	.71251	.07591	.30161				
#1	3033.3	50719.	5956.7				
#2	3064.0	50773.	5982.1				

Sample Name: s1-3296663 Acquired: 5/30/2015 11:39:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	1.0172	1.0257	2.0451	1.0287	.99757	.99835	.00063	10.038	1.0237	1.0056	1.0386	1.0198	5.0193
Stddev	.0004	.0022	.0040	.0000	.00031	.00047	.00173	.004	.0007	.0006	.0008	.0007	.0046
%RSD	.03475	.21770	.19464	.00149	.03058	.04684	274.49	.04123	.06447	.05537	.08125	.07125	.09219
#1	1.0169	1.0273	2.0479	1.0287	.99778	.99802	.00185	10.036	1.0241	1.0059	1.0380	1.0203	5.0160
#2	1.0174	1.0242	2.0423	1.0288	.99735	.99868	-.00059	10.041	1.0232	1.0052	1.0392	1.0192	5.0226

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm
Avg	100.09	2.0012	40.722	1.0078	1.0058	10.087	10.233	.99201	2.0623	2.0347	.00208	2.0652	2.0667
Stddev	.07	.0024	.043	.0015	.0023	.044	.146	.00153	.0047	.0034	.00269	.0025	.0055
%RSD	.07066	.11931	.10457	.14943	.22940	.43887	1.4259	.15425	.22711	.16701	128.98	.12114	.26697
#1	100.04	1.9996	40.692	1.0067	1.0041	10.118	10.336	.99309	2.0590	2.0323	.00018	2.0635	2.0628
#2	100.14	2.0029	40.752	1.0088	1.0074	10.056	10.129	.99093	2.0656	2.0371	.00398	2.0670	2.0706

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass					
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Elem Units	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	9.9038	21.194	2.0355	.99881	-.00454	1.0068	2.0434	-.05659	1.0069	1.0087	.99426
Stddev	.0213	.046	.0048	.00068	.00145	.0008	.0076	.00237	.0018	.0020	.00181
%RSD	.21551	.21551	.23683	.06810	31.900	.07981	.37424	4.1844	.17591	.20117	.18180
#1	9.8887	21.162	2.0321	.99929	-.00352	1.0062	2.0380	-.05492	1.0056	1.0102	.99298
#2	9.9189	21.227	2.0389	.99833	-.00557	1.0074	2.0488	-.05827	1.0081	1.0073	.99554

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3124.7	53121.	6277.2
Stddev	5.8	43.	9.0
%RSD	.18413	.08151	.14301
#1	3120.6	53152.	6270.9
#2	3128.8	53090.	6283.6

Sample Name: s2-3294467 Acquired: 5/30/2015 11:41:50 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.01350	100.00	-.00491	.00353	.00134	.00030	2.0371	.07081	-.00020	-.00073	.00112	.00190	101.48
Stddev	.00047	.67	.00194	.00034	.00009	.00010	.0198	.00108	.00002	.00017	.00006	.00020	.35
%RSD	3.4660	.66592	39.576	9.6081	6.4348	32.402	.97198	1.5189	10.908	23.372	5.2080	10.698	.34255
#1	-.01317	99.533	-.00628	.00377	.00128	.00037	2.0511	.07005	-.00018	-.00061	.00108	.00176	101.23
#2	-.01383	100.47	-.00353	.00329	.00140	.00023	2.0231	.07157	-.00022	-.00085	.00116	.00205	101.72
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.19810	.00150	.07573	-.00256	-.00019	498.48	.00452	.01286	.00344	10.256	-.01862	.01919	-.06766
Stddev	.00987	.00067	.01059	.00005	.00016	.77	.00002	.00022	.00239	.070	.00185	.00048	.00327
%RSD	4.9848	44.739	13.990	2.0032	83.662	.15380	.43543	1.7453	69.578	.68540	9.9261	2.4840	4.8365
#1	.20508	.00197	.06824	-.00260	-.00030	497.94	.00450	.01271	.00513	10.306	-.01993	.01885	-.06997
#2	.19112	.00102	.08322	-.00253	-.00008	499.02	.00453	.01302	.00175	10.206	-.01732	.01953	-.06534
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.14479	-.00208	.00100	9.9918	-.02909	.00197	20.120	.00461	.00169	-.23869			
Stddev	.00700	.00037	.00008	.0190	.00055	.00047	.037	.00020	.00025	.00238			
%RSD	4.8365	17.912	8.2602	.19047	1.8936	23.735	.18538	4.3806	14.623	.99764			
#1	-.14974	-.00234	.00106	9.9783	-.02948	.00230	20.093	.00446	.00186	-.24038			
#2	-.13984	-.00181	.00095	10.005	-.02870	.00164	20.146	.00475	.00151	-.23701			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3056.1	51678.	6206.6										
Stddev	4.9	300.	29.5										
%RSD	.16118	.57963	.47555										
#1	3059.6	51890.	6185.8										
#2	3052.6	51466.	6227.5										

Sample Name: ICVH-3289305 Acquired: 5/30/2015 11:45:54 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00361	39.038	-0.00332	.00047	.00009	-0.00009	.49933	.01479	-0.00019	.00004	.00036
Stddev	.00002	.047	.00384	.00006	.00005	.00003	.00307	.00058	.00011	.00014	.00032
%RSD	.58700	.12164	115.70	13.191	54.931	33.732	.61568	3.9514	56.904	369.90	88.629
#1	-.00360	39.072	-.00603	.00043	.00012	-.00011	.49716	.01438	-.00026	-.00006	.00013
#2	-.00363	39.005	-.00060	.00052	.00005	-.00007	.50150	.01521	-.00011	.00014	.00058
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00058	76.943	-.04036	.00060	.01638	-.00027	-.00100	40.497	.00211	.00380	-.00077
Stddev	.00023	.140	.04502	.00091	.00834	.00007	.00042	.046	.00015	.00117	.00021
%RSD	39.571	.18223	111.54	150.60	50.888	27.297	42.058	.11255	7.0851	30.804	27.016
#1	-.00075	76.843	-.07219	-.00004	.01049	-.00032	-.00129	40.465	.00221	.00297	-.00092
#2	-.00042	77.042	-.00853	.00125	.02228	-.00022	-.00070	40.529	.00200	.00462	-.00063
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3.7440	-.00991	.00136	-.01574	-.03368	-.00092	.00028	2.8657	-.00831	.00099	4.9858
Stddev	.0280	.00190	.00142	.00243	.00519	.00012	.00003	.0053	.00020	.00331	.0498
%RSD	.74870	19.153	104.31	15.411	15.411	12.841	10.430	.18325	2.4571	336.13	.99884
#1	3.7242	-.01125	.00237	-.01745	-.03735	-.00084	.00030	2.8694	-.00846	-.00136	4.9506
#2	3.7639	-.00856	.00036	-.01402	-.03001	-.00100	.00026	2.8620	-.00817	.00333	5.0210
Check ?	Chk Warn	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value Range	4.0000 -5.4900%										
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00176	-.00020	-.07075								
Stddev	.00036	.00033	.00125								
%RSD	20.517	160.75	1.7737								
#1	.00150	.00003	-.07164								
#2	.00201	-.00044	-.06986								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3105.1	54064.	6305.4								
Stddev	25.5	163.	25.2								
%RSD	.82159	.30226	.39937								
#1	3087.0	54180.	6323.2								
#2	3123.1	53949.	6287.6								

Sample Name: ICV-3289337 Acquired: 5/30/2015 11:49:56 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .25092	Al1670 ppm W .26503	As1890 ppm .24902	B_2089 ppm .25284	Ba4554 ppm .24370	Be3130 ppm .24209	Bi2230 ppm .00133	Ca3179 ppm 1.9932	Cd2288 ppm .25436	Co2286 ppm .25086	Cr2055 ppm .25600
#1	.24989	.26392	.25058	.25304	.24358	.24287	.00097	1.9922	.25544	.25223	.25748
#2	.25194	.26615	.24746	.25264	.24383	.24131	.00170	1.9942	.25328	.24949	.25453
Check ? Value Range	Chk Pass	Chk Warn .25000 5.4900%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .24806	Fe2599 ppm .24983	K_7664 ppm 19.723	Li6707 ppm .25268	Mg2790 ppm 10.177	Mn2576 ppm .24796	Mo2020 ppm .24399	Na5895 ppm 2.0308	Ni2316 ppm .24837	P_1782 ppm 2.0312	Pb2203 ppm .25294
#1	.24723	.25045	19.778	.24991	10.190	.24786	.24533	2.0043	.24875	2.0396	.25464
#2	.24889	.24921	19.668	.25545	10.165	.24805	.24265	2.0574	.24800	2.0227	.25123
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .00413	Sb2068 ppm .25524	Se1960 ppm .51194	Si2881 ppm 1.9807	SiO2 ppm 4.2387	Sn1899 ppm .50871	Sr4077 ppm .24406	Th2837 ppm -.00062	Ti3349 ppm .24742	Tl1908 ppm .51833	U_3701 ppm -.04045
#1	.00207	.25629	.51488	1.9409	4.1536	.51176	.24418	-.00041	.24740	.52130	-.04708
#2	.00619	.25418	.50899	2.0204	4.3238	.50567	.24394	-.00083	.24744	.51537	-.03383
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .24608	Zn2062 ppm .24779	Zr3391 ppm .24469								
#1	.24591	.24958	.24116								
#2	.24625	.24600	.24823								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3148.3	Y_3600 Cts/S 53686.	Y_3774 Cts/S 6111.2								
#1	3155.2	53619.	6094.7								
#2	3141.3	53754.	6127.8								

Sample Name: ICV-3289337 Acquired: 5/30/2015 12:03:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.24324	.25759	.24197	.24578	.24470	.24102	.00029	.19947	.24696	.24932	.25452	.24081	.24591
Stddev	.00103	.00014	.00294	.00056	.00064	.00072	.00116	.0029	.00045	.00057	.00045	.00030	.00114
%RSD	.42438	.05395	1.2156	.22879	.26171	.29830	401.84	.14518	.18372	.22904	.17699	.12318	.46367
#1	.24397	.25749	.24405	.24538	.24425	.24051	.00111	1.9968	.24664	.24891	.25420	.24102	.24511
#2	.24251	.25769	.23989	.24618	.24516	.24152	-.00053	1.9927	.24728	.24972	.25484	.24060	.24672

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	19.546	.24767	9.9256	.24469	.24551	1.9565	.24665	1.9779	.24855	.00084	.24991	.49467	1.9451
Stddev	.047	.00000	.0363	.00032	.00054	.0167	.00049	.0034	.00079	.00231	.00092	.00327	.0037
%RSD	.24266	.00171	.36537	.13127	.22162	.85111	.19879	.17061	.31738	276.57	.36795	.66057	.18833
#1	19.512	.24768	9.9513	.24447	.24512	1.9682	.24630	1.9803	.24910	.00247	.25056	.49698	1.9426
#2	19.579	.24767	9.9000	.24492	.24589	1.9447	.24700	1.9755	.24799	-.00080	.24926	.49236	1.9477

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	4.1626	.50532	.24363	-.00152	.24748	.51134	-.02203	.24350	.24380	.24241
Stddev	.0078	.00070	.00042	.00087	.00014	.00213	.00299	.00130	.00216	.00216
%RSD	.18833	.13889	.17281	56.848	.05702	.41691	13.576	.53315	.88518	.89238
#1	4.1571	.50581	.24333	-.00091	.24738	.50983	-.02414	.24442	.24227	.24394
#2	4.1681	.50482	.24393	-.00214	.24758	.51284	-.01991	.24258	.24532	.24088

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3128.4	53520.	6113.8								
Stddev	4.9	154.	11.9								
%RSD	.15650	.28716	.19536								
#1	3131.9	53411.	6122.3								
#2	3125.0	53629.	6105.4								

Sample Name: ICV-3289337 Acquired: 5/30/2015 12:05:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .24315	Al1670 ppm .25792	As1890 ppm .24631	B_2089 ppm .24866	Ba4554 ppm .24428	Be3130 ppm .24064	Bi2230 ppm .00062	Ca3179 ppm 1.9758	Cd2288 ppm .25019	Co2286 ppm .25051	Cr2055 ppm .25559	Cu3247 ppm .24327	Fe2599 ppm .24539
#1	.24283	.25752	.24546	.24788	.24352	.24051	.00148	1.9629	.25068	.25104	.25656	.24354	.24351
#2	.24348	.25832	.24716	.24945	.24504	.24077	-.00024	1.9887	.24969	.24997	.25462	.24299	.24726
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm 19.390	Li6707 ppm .24640	Mg2790 ppm 9.9253	Mn2576 ppm .24472	Mo2020 ppm .24762	Na5895 ppm 1.9653	Ni2316 ppm .24871	P_1782 ppm 1.9997	Pb2203 ppm .25224	S_1820 ppm .00300	Sb2068 ppm .25067	Se1960 ppm .49449	Si2881 ppm 1.9471
#1	19.363	.24529	9.9506	.24433	.24880	1.9459	.24942	2.0122	.25239	.00321	.25279	.49534	1.9270
#2	19.416	.24750	9.9001	.24512	.24644	1.9847	.24801	1.9871	.25209	.00278	.24854	.49365	1.9672
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 4.1668	Sn1899 ppm .51069	Sr4077 ppm .24332	Th2837 ppm -.00180	Ti3349 ppm .24793	Tl1908 ppm .51550	U_3701 ppm -.00676	V_2924 ppm .24378	Zn2062 ppm .24243	Zr3391 ppm .24094			
#1	4.1237	.51134	.24303	-.00051	.24813	.51473	-.00944	.24325	.24177	.23947			
#2	4.2098	.51004	.24362	-.00309	.24773	.51627	-.00408	.24432	.24308	.24241			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3116.7	Y_3600 Cts/S 53451.	Y_3774 Cts/S 6118.9										
#1	3119.3	53599.	6145.6										
#2	3114.1	53303.	6092.2										

Sample Name: ICVL-3301032 Acquired: 5/30/2015 12:11:12 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01003	.10704	.01508	.10552	.01040	.00090	.10654	.20629	.00514	.01069	.01080	.01548
Stddev	.00008	.00113	.00253	.00061	.00020	.00008	.00374	.00532	.00029	.00015	.00014	.00004
%RSD	.80629	1.0534	16.779	.58133	1.8988	8.3650	3.5146	2.5799	5.5885	1.3974	1.3071	.24376

#1	.00997	.10784	.01329	.10508	.01054	.00085	.10919	.20253	.00535	.01059	.01090	.01551
#2	.01009	.10625	.01687	.10595	.01026	.00095	.10389	.21006	.00494	.01080	.01070	.01545

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10056	3.0385	.00936	.21533	.01070	.02059	1.0315	.04239	2.9863	.00999	.00762	.00913
Stddev	.00289	.0204	.00020	.00922	.00028	.00008	.0005	.00012	.0474	.00135	.00016	.00088
%RSD	2.8783	.67273	2.1251	4.2812	2.6321	.38531	.04476	.28619	1.5856	13.537	2.1584	9.6624

#1	.09851	3.0240	.00950	.22185	.01050	.02054	1.0311	.04248	3.0198	.00904	.00751	.00851
#2	.10260	3.0529	.00921	.20881	.01090	.02065	1.0318	.04231	2.9528	.01095	.00774	.00976

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01749	.49285	1.0547	.10566	.01031	.01780	.01039	.01510	.03700	.01051	.02306	.01381
Stddev	.00399	.01418	.0303	.00039	.00012	.00047	.00019	.00088	.02187	.00040	.00114	.00022
%RSD	22.813	2.8766	2.8766	.37282	1.1988	2.6270	1.8177	5.8575	59.105	3.8074	4.9275	1.6141

#1	.01467	.48282	1.0332	.10538	.01022	.01747	.01025	.01572	.05246	.01080	.02226	.01365
#2	.02032	.50287	1.0762	.10594	.01039	.01813	.01052	.01447	.02154	.01023	.02387	.01397

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3093.6	53141.	6153.3
Stddev	3.3	245.	12.7
%RSD	.10827	.46061	.20593

#1	3091.3	52968.	6162.3
#2	3096.0	53314.	6144.4

Sample Name: CCVH-3294468 Acquired: 5/30/2015 12:14:02 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00759	49.687	-.00178	.00192	.00040	.00004	1.0244	.03784	-.00022	-.00030	.00087	.00137	50.120
Stddev	.00014	.274	.00080	.00005	.00006	.00001	.0080	.00160	.00001	.00022	.00014	.00002	.384
%RSD	1.8127	.55194	44.703	2.5737	13.836	27.895	.78601	4.2388	4.5152	74.018	16.551	1.7120	.76621
#1	-.00769	49.881	-.00235	.00195	.00044	.00004	1.0300	.03897	-.00023	-.00046	.00077	.00135	50.391
#2	-.00749	49.493	-.00122	.00188	.00036	.00003	1.0187	.03670	-.00021	-.00014	.00097	.00138	49.848
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.01212	-.00180	.03629	-.00089	-.00026	250.10	.00227	.00733	.00210	5.0795	-.01045	.00801	-.04989
Stddev	.00290	.00095	.00147	.00017	.00023	1.59	.00009	.00103	.00023	.0187	.00067	.00526	.00952
%RSD	23.889	52.796	4.0481	19.234	89.092	.63608	3.9648	14.096	11.135	.36718	6.3904	65.681	19.083
#1	-.01007	-.00112	.03733	-.00101	-.00010	251.23	.00221	.00806	.00193	5.0927	-.00998	.00429	-.05663
#2	-.01417	-.00247	.03525	-.00077	-.00042	248.98	.00234	.00660	.00226	5.0663	-.01093	.01173	-.04316
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.10677	-.00159	.00037	4.9604	-.01402	.00192	10.472	.00266	.00110	-.11877			
Stddev	.02038	.00025	.00009	.0236	.00084	.00160	.031	.00027	.00047	.00058			
%RSD	19.083	15.453	25.336	.47626	5.9565	83.189	.29593	9.9735	42.725	.48802			
#1	-.12118	-.00142	.00043	4.9771	-.01462	.00079	10.450	.00285	.00144	-.11836			
#2	-.09237	-.00176	.00030	4.9437	-.01343	.00305	10.494	.00247	.00077	-.11918			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3069.6	52157.	6074.7										
Stddev	15.3	474.	38.5										
%RSD	.49905	.90813	.63351										
#1	3058.8	51822.	6047.5										
#2	3080.4	52492.	6101.9										

Sample Name: CCV-3296664 Acquired: 5/30/2015 12:16:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49455	Al1670 ppm W. .53477	As1890 ppm 1.0106	B_2089 ppm .51439	Ba4554 ppm .48872	Be3130 ppm .48661	Bi2230 ppm -.00046	Ca3179 ppm 4.9910	Cd2288 ppm .50567	Co2286 ppm .51648	Cr2055 ppm .52434
#1	.49761	.53643	1.0108	.51417	.48894	.48616	.00032	4.9966	.50525	.51819	.52410
#2	.49148	.53311	1.0105	.51462	.48850	.48705	-.00123	4.9854	.50609	.51478	.52457
Check ? Value Range	Chk Pass	Chk Warn .50000 5.0000%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .49709	Fe2599 ppm 2.4945	K_7664 ppm 48.896	Li6707 ppm .97732	Mg2790 ppm 19.798	Mn2576 ppm .49537	Mo2020 ppm .50346	Na5895 ppm 5.0477	Ni2316 ppm .51047	P_1782 ppm 1.0210	Pb2203 ppm 1.0165
#1	.49816	2.4966	48.967	.97530	19.871	.49708	.50435	5.0801	.51148	1.0209	1.0184
#2	.49603	2.4924	48.825	.97935	19.725	.49365	.50256	5.0152	.50946	1.0211	1.0145
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .00241	Sb2068 ppm 1.0172	Se1960 ppm 1.0079	Si2881 ppm 4.9101	SiO2 ppm 10.508	Sn1899 ppm 1.0220	Sr4077 ppm .48841	Th2837 ppm -.00125	Ti3349 ppm .49266	Tl1908 ppm 1.0386	U_3701 ppm -.03090
#1	.00551	1.0200	1.0145	4.9312	10.553	1.0250	.48827	-.00026	.49439	1.0393	-.04721
#2	-.00069	1.0145	1.0013	4.8890	10.462	1.0191	.48855	-.00223	.49094	1.0380	-.01460
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .49285	Zn2062 ppm .50178	Zr3391 ppm .49217								
#1	.49479	.50146	.49025								
#2	.49092	.50210	.49410								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3066.2	Y_3600 Cts/S 53282.	Y_3774 Cts/S 6202.2								
#1	3064.3	53316.	6184.6								
#2	3068.0	53249.	6219.9								

Sample Name: ICB Acquired: 5/30/2015 12:19:14 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00007	.00148	-.00320	.00183	-.00001	-.00007	.00018	.00280	.00005	.00004	-.00002	-.00012	.00188
Stddev	.00004	.00034	.00074	.00014	.00034	.00014	.00021	.00250	.00023	.00021	.00001	.00019	.00213
%RSD	49.942	23.282	23.092	7.5831	2803.5	190.63	113.78	89.180	455.14	467.06	84.925	162.54	113.40

#1	.00010	.00172	-.00372	.00174	-.00026	.00003	.00033	.00457	-.00011	.00019	-.00003	-.00025	.00037
#2	.00005	.00124	-.00268	.00193	.00023	-.00017	.00004	.00104	.00022	-.00010	-.00001	.00002	.00338

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.00658	-.00123	.00815	.00008	.00019	.01773	.00030	.00151	-.00049	.00119	-.00293	-.00327	-.01107
Stddev	.00842	.00106	.00594	.00003	.00057	.01458	.00071	.00111	.00060	.00776	.00141	.00513	.00301
%RSD	127.93	86.513	72.875	31.882	294.01	82.211	234.03	73.401	122.35	651.76	47.970	156.82	27.171
#1	-.00063	-.00198	.01234	.00006	-.00021	.02804	.00081	.00072	-.00007	-.00430	-.00392	-.00690	-.01319
#2	-.01253	-.00048	.00395	.00010	.00060	.00742	-.00020	.00229	-.00091	.00668	-.00194	.00036	-.00894

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.02368	.00065	.00019	.00208	-.00004	-.00071	-.00428	.00006	.00033	-.00021			
Stddev	.00643	.00021	.00012	.00060	.00007	.00160	.00224	.00008	.00046	.00011			
%RSD	27.171	32.230	63.155	29.047	180.55	224.77	52.482	144.82	138.85	53.521			
#1	-.02823	.00080	.00027	.00250	-.00008	-.00185	-.00269	.00000	.00065	-.00029			
#2	-.01913	.00050	.00010	.00165	.00001	.00042	-.00586	.00012	.00001	-.00013			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3104.4	53302.	6107.9										
Stddev	1.6	135.	6.6										
%RSD	.05172	.25373	.10760										
#1	3103.3	53398.	6103.2										
#2	3105.5	53207.	6112.5										

Sample Name: CRI-3301019 Acquired: 5/30/2015 12:22:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00950	Al1670 ppm .10330	As1890 ppm W .00732	B_2089 ppm .10301	Ba4554 ppm .00490	Be3130 ppm .00090	Bi2230 ppm .10418	Ca3179 ppm .20249	Cd2288 ppm .00504	Co2286 ppm .00542	Cr2055 ppm .01038
#1	.00961	.10257	.00470	.10342	.00493	.00091	.10426	.20398	.00520	.00537	.01024
#2	.00939	.10403	.00994	.10260	.00486	.00090	.10411	.20099	.00487	.00546	.01052
Check ? Value Range	Chk Pass	Chk Pass	Chk Warn .01000 -20.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .01019	Fe2599 ppm .03054	K_7664 ppm .98108	Li6707 ppm .00817	Mg2790 ppm .20241	Mn2576 ppm .00311	Mo2020 ppm .00978	Na5895 ppm .10121	Ni2316 ppm .01021	P_1782 ppm .98158	Pb2203 ppm W .00393
#1	.01025	.03138	.96740	.00907	.20304	.00307	.00980	1.0025	.01012	.98274	.00410
#2	.01014	.02970	.99477	.00727	.20178	.00315	.00975	1.0218	.01029	.98042	.00377
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00300 20.490%
Elem Units Avg Stddev %RSD	S_1820 ppm .09852	Sb2068 ppm W .00726	Se1960 ppm .00970	Si2881 ppm .46422	SiO2 ppm .99343	Sn1899 ppm .02131	Sr4077 ppm .00499	Th2837 ppm W .01336	Ti3349 ppm .01006	Tl1908 ppm .01128	U_3701 ppm W .03840
#1	.09793	.00708	.01045	.45387	.97129	.02095	.00486	.01354	.00989	.01049	.05372
#2	.09910	.00745	.00894	.47456	1.0156	.02168	.00513	.01318	.01024	.01207	.02308
Check ? Value Range	Chk Pass	Chk Warn .01000 -20.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .01000 20.490%	Chk Pass	Chk Pass	Chk Warn .06000 -20.490%
Elem Units Avg Stddev %RSD	V_2924 ppm .00951	Zn2062 ppm .01054	Zr3391 ppm .00924								
#1	.00930	.01016	.00781								
#2	.00972	.01092	.01068								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3120.6	Y_3600 Cts/S 53780.	Y_3774 Cts/S 6162.1								
#1	3125.4	53744.	6168.4								
#2	3115.8	53816.	6155.8								

Sample Name: cri-3301171 Acquired: 5/30/2015 12:31:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0048	.00146	.00850	.00043	-0.0024	-0.0003	-0.0026	.00256	-0.00018
Stddev	.00004	.00005	.00059	.00104	.00009	.00008	.00043	.00059	.00003
%RSD	7.3153	3.4786	6.8840	242.62	39.445	291.47	166.05	22.952	16.084
#1	-.00051	.00143	.00809	-.00031	-.00017	-.00008	-.00057	.00215	-.00016
#2	-.00046	.00150	.00892	.00116	-.00030	.00003	.00005	.00298	-.00020
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.00001	-.00066	-.00040	-.06302	-.00147	-.00274	-.00008	.00031
Stddev	.00018	.00014	.00037	.00200	.02414	.00088	.00121	.00009	.00001
%RSD	348.95	2396.8	55.913	501.43	38.305	60.365	44.018	120.19	4.1232
#1	.00018	.00011	-.00040	.00102	-.04595	-.00209	-.00189	-.00001	.00030
#2	-.00008	-.00010	-.00092	-.00181	-.08009	-.00084	-.00360	-.00014	.00032
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01178	-.00044	.00341	.00853	.00508	.00784	.00093	-.02026	-.04336
Stddev	.00785	.00009	.00007	.00129	.00168	.00043	.00070	.00339	.00726
%RSD	66.627	19.291	1.9924	15.146	33.021	5.5463	74.893	16.754	16.754
#1	-.00623	-.00038	.00336	.00944	.00390	.00753	.00044	-.01786	-.03822
#2	-.01734	-.00050	.00345	.00762	.00627	.00815	.00142	-.02266	-.04850
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.00013	.01457	.00040	.00073	.00158	.00007	-.00018	.00113
Stddev	.00064	.00007	.00079	.00016	.00281	.00657	.00016	.00048	.00126
%RSD	290.98	55.808	5.4001	40.935	386.24	416.30	240.31	265.19	111.72
#1	-.00023	.00008	.01512	.00028	-.00126	-.00307	-.00005	.00016	.00203
#2	.00067	.00018	.01401	.00051	.00271	.00623	.00018	-.00052	.00024
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3132.0	53862.	6184.5						
Stddev	8.3	70.	7.6						
%RSD	.26538	.13041	.12218						
#1	3137.9	53912.	6189.8						
#2	3126.1	53813.	6179.1						

Sample Name: ICSA-3279402 Acquired: 5/30/2015 12:38:17 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00038	Al3092 ppm 513.14	As1890 ppm .00488	B_2089 ppm -.00696	Ba4554 ppm .00024	Be3130 ppm -.00017	Bi2230 ppm -.00504	Ca3179 ppm 465.55	Cd2288 ppm -.00076	Co2286 ppm -.00020	Cr20555 ppm W .00410
#1	.00029	510.92	.00982	-.00813	.00052	-.00020	-.00555	457.74	-.00096	.00025	.00399
#2	.00047	515.36	-.00006	-.00580	-.00005	-.00014	-.00454	473.37	-.00056	-.00064	.00421
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00186 -.00186
Elem Units Avg Stddev %RSD	Cu3247 ppm .00065	Fe2714 ppm 183.79	K_7664 ppm -.10616	Li6707 ppm .00275	Mg2790 ppm 507.12	Mn2576 ppm W .00118	Mo2020 ppm W -.00642	Na5895 ppm .02326	Ni2316 ppm W .00843	P_1782 ppm -.00018	Pb2203 ppm W .00522
#1	.00101	182.94	-.12364	.00331	507.19	.00122	-.00697	.02191	.00928	-.00306	.00490
#2	.00029	184.64	-.08867	.00220	507.05	.00115	-.00588	.02462	.00758	.00271	.00553
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00050 -.00050	Chk Warn .00626 -.00626	Chk Pass	Chk Warn .00258 -.00258	Chk Pass	Chk Warn .00500 -.00500
Elem Units Avg Stddev %RSD	S_1820 ppm -.10164	Sb2068 ppm W -.01443	Se1960 ppm .00879	Si2881 ppm .00300	SiO2 ppm .00643	Sn1899 ppm .00216	Sr4077 ppm W .00453	Th2837 ppm F .02029	Ti3349 ppm -.00007	TI1908 ppm W -.01209	U_3701 ppm -.16670
#1	-10734	-0.01415	.01021	.00972	.02080	.00215	.00455	.02107	-.00008	-.01675	-.17134
#2	-.09593	-.01470	.00736	-.00372	-.00795	.00217	.00452	.01951	-.00007	-.00742	-.16206
Check ? High Limit Low Limit	Chk Pass	Chk Warn .00628 -.00628	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn .00050 -.00050	Chk Fail .02000 -.02000	Chk Pass	Chk Warn .00982 -.00982	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00034	Zn2062 ppm .00267	Zr3391 ppm -.00427								
#1	.00095	.00263	-.00417								
#2	-.00028	.00272	-.00438								
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2809.9	Y_3600 Cts/S 47381.	Y_3774 Cts/S 5875.9								
#1	2808.0	47516.	5910.4								
#2	2811.9	47247.	5841.5								

Sample Name: ICSA-3279402 Acquired: 5/30/2015 12:43:40 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00018	510.56	.00648	W -.00740	.00016	-.00025	-.00306	464.90	-.00063	-.00032	W .00406
Stddev	.00112	1.06	.00754	.00093	.00029	.00014	.00329	.59	.00010	.00037	.00017
%RSD	608.46	.20743	116.47	12.535	175.48	56.128	107.41	.12621	15.477	117.08	4.1458
#1	-.00061	511.31	.00114	-.00806	-.00004	-.00015	-.00539	464.49	-.00069	-.00005	.00418
#2	.00098	509.81	.01181	-.00675	.00037	-.00035	-.00074	465.32	-.00056	-.00058	.00394
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00700 -.00700	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00186 -.00186
High Limit											
Low Limit											
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00062	182.66	-.15660	.00254	504.49	W .00115	-.00542	.02115	W .00863	-.00794	W .00565
Stddev	.00064	.37	.01266	.00118	1.52	.00011	.00022	.00777	.00037	.00480	.00215
%RSD	104.55	.20235	8.0834	46.492	.30168	9.1516	4.1259	36.747	4.3087	60.361	37.958
#1	-.00107	182.92	-.14765	.00338	505.57	.00108	-.00526	.02664	.00837	-.01134	.00717
#2	-.00016	182.39	-.16555	.00171	503.41	.00123	-.00558	.01565	.00890	-.00455	.00413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00050 -.00050	Chk Pass	Chk Pass	Chk Warn .00258 -.00258	Chk Pass	Chk Warn .00500 -.00500
High Limit											
Low Limit											
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	-.09237	W -.00903	.00636	.00401	.00859	.00375	W .00447	W .01916	-.00028	W -.01018	-.19219
Stddev	.00722	.00159	.00260	.00832	.01781	.00275	.00001	.00564	.00009	.00089	.02148
%RSD	7.8165	17.556	40.946	207.45	207.45	73.235	.20632	29.438	31.597	8.7398	11.174
#1	-.08726	-.00791	.00820	-.00187	-.00401	.00569	.00447	.01517	-.00034	-.01081	-.17700
#2	-.09747	-.01016	.00452	.00990	.02118	.00181	.00446	.02315	-.00022	-.00955	-.20737
Check ?	Chk Pass	Chk Warn .00628 -.00628	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn .00050 -.00050	Chk Warn .00800 -.00800	Chk Pass	Chk Warn .00982 -.00982	Chk Pass
High Limit											
Low Limit											
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00071	.00249	W -.00589								
Stddev	.00054	.00080	.00041								
%RSD	75.917	32.069	6.9006								
#1	.00110	.00305	-.00618								
#2	.00033	.00192	-.00560								
Check ?	Chk Pass	Chk Pass	Chk Warn .00476 -.00476								
High Limit											
Low Limit											
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2756.8	46181.	5773.0								
Stddev	4.8	51.	32.4								
%RSD	.17453	.11119	.56106								
#1	2753.4	46217.	5795.9								
#2	2760.2	46145.	5750.1								

Sample Name: ICSAB-3290308 Acquired: 5/30/2015 12:49:46 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	1.0465	503.03	1.9404	1.9326	.49186	.47017	.95804	461.64	1.0147	.45929	.44444	.51219	180.26
Stddev	.0018	.44	.0170	.0064	.00102	.00023	.00235	7.66	.0032	.00007	.00144	.00159	.00
%RSD	.16889	.08830	.87418	.33008	.20737	.04951	.24576	1.6585	.31405	.01489	.32425	.31002	.00263
#1	1.0478	502.72	1.9284	1.9281	.49258	.47000	.95638	456.23	1.0125	.45934	.44546	.51331	180.25
#2	1.0453	503.35	1.9524	1.9371	.49114	.47033	.95971	467.06	1.0170	.45924	.44342	.51107	180.26

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.811	.98900	498.83	.48147	.91963	50.170	.91252	1.9259	.92457	.94546	.96758	4.8162	10.253
Stddev	.183	.00157	4.04	.00036	.00197	.520	.00620	.0212	.00042	.01789	.00301	.0229	.015
%RSD	.36747	.15874	.80986	.07452	.21439	1.0356	.67923	1.1025	.04591	.8921	.31121	.47592	.14255
#1	49.940	.99011	495.97	.48121	.91824	49.802	.91690	1.9109	.92487	.93281	.96545	4.8000	10.263
#2	49.682	.98789	501.68	.48172	.92103	50.537	.90814	1.9410	.92427	.95811	.96971	4.8324	10.242

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	21.940	8.9134	.94542	2.0060	.94806	8.4594	-.20714	.49725	.91704	.88297			
Stddev	.031	.0090	.00066	.0043	.00147	.1016	.00269	.00234	.00119	.00117			
%RSD	.14255	.10097	.06940	.21459	.15514	1.2005	1.2971	.47076	.12957	.13202			
#1	21.962	8.9070	94588	2.0091	.94910	8.5312	-.20524	.49891	.91788	.88380			
#2	21.918	8.9197	.94496	2.0030	.94702	8.3876	-.20904	.49560	.91620	.88215			

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass					
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Chk Pass							
Avg	2780.3	46860.	5894.4								
Stddev	3.0	57.	6.3								
%RSD	.10750	.12206	.10613								
#1	2782.4	46900.	5890.0								
#2	2778.2	46819.	5898.9								

Sample Name: LRA-3255707 Acquired: 5/30/2015 12:52:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00137	Al1670 ppm -.29703	As1890 ppm 9.6508	B_2089 ppm 9.4977	Ba4554 ppm 11.817	Be3130 ppm -.00597	Bi2230 ppm -.00948	Ca3179 ppm .07879	Cd2288 ppm 1.9940	Co2286 ppm 4.8461	Cr2055 ppm 9.6992	Cu3247 ppm 10.142	Fe2714 ppm 491.85
#1	.00112	-.29346	9.6355	9.4725	11.761	-.00591	-.00955	.08034	1.9884	4.8392	9.6836	10.137	490.07
#2	.00163	-.30059	9.6660	9.5228	11.872	-.00603	-.00941	.07725	1.9995	4.8530	9.7147	10.147	493.64
Check ? Value Range	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.32007	Li6707 ppm -.00243	Mg2790 ppm .00372	Mn2576 ppm 9.5104	Mo2020 ppm 4.7875	Na5895 ppm .00483	Ni2316 ppm 9.6716	P_1782 ppm .01008	Pb2203 ppm 9.7654	S_1820 ppm -.02108	Sb2068 ppm .02498	Se1960 ppm 4.9019	Si2881 ppm 46.736
#1	-.32098	-.00269	.00164	9.4486	4.7804	-.00713	9.6597	.01077	9.7547	-.02274	.02245	4.8526	46.415
#2	-.31916	-.00218	.00581	9.5721	4.7946	.01679	9.6835	.00940	9.7762	-.01941	.02750	4.9512	47.057
Check ? Value Range	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 100.01	Sn1899 ppm .02321	Sr4077 ppm 9.7132	Th2837 ppm .05621	Ti3349 ppm 9.7543	TI1908 ppm 5.0102	U_3701 ppm -.40025	V_2924 ppm 9.7318	Zn2062 ppm 9.3808	Zr3391 ppm -.00908			
#1	99.327	.02245	9.5976	.05587	9.7574	4.9606	-.37658	9.7404	9.3750	-.00897			
#2	100.70	.02398	9.8288	.05655	9.7512	5.0597	-.42392	9.7231	9.3867	-.00920			
Check ? Value Range	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None			
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3008.6	Y_3600 Cts/S 51500.	Y_3774 Cts/S 5956.3										
#1	3008.1	51588.	5997.0										
#2	3009.1	51412.	5915.6										

Sample Name: CCVH-3294468 Acquired: 5/30/2015 12:55:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00709	49.406	.00120	.01744	.00172	-.00015	1.0100	.03769	-.00021	.00004	.00081	.00169	50.044
Stddev	.00048	.049	.00075	.00182	.00064	.00011	.0048	.00089	.00033	.00029	.00012	.00042	.518
%RSD	6.7517	.09966	61.937	10.420	37.141	69.590	.47946	2.3585	159.69	777.67	14.880	24.942	1.0356
#1	-.00675	49.371	.00173	.01873	.00217	-.00023	1.0135	.03706	.00003	.00024	.00072	.00139	49.678
#2	-.00743	49.441	.00068	.01616	.00127	-.00008	1.0066	.03832	-.00045	-.00017	.00089	.00198	50.411
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.07498	.00169	.04275	-.00076	.00180	247.85	.00257	.00701	.00189	5.0254	-.01344	.00985	.01753
Stddev	.06090	.00040	.00151	.00014	.00017	.58	.00078	.00078	.00157	.0471	.00197	.00195	.00483
%RSD	81.220	23.360	3.5358	18.140	9.3009	.23564	30.250	11.114	83.110	.93646	14.670	19.810	27.573
#1	-.03192	.00197	.04168	-.00066	.00168	248.26	.00312	.00646	.00078	5.0587	-.01484	.01123	.02095
#2	-.11805	.00141	.04382	-.00086	.00192	247.43	.00202	.00756	.00299	4.9921	-.01205	.00847	.01412
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.03752	-.00098	.00140	4.9577	-.01239	.00134	10.450	.00337	.00039	-.12160			
Stddev	.01035	.00005	.00023	.0065	.00035	.00165	.020	.00036	.00009	.00221			
%RSD	27.573	5.1216	16.269	.13196	2.8361	123.72	.18722	10.646	22.736	1.8213			
#1	.04484	-.00101	.00156	4.9531	-.01214	.00017	10.464	.00362	.00046	-.12317			
#2	.03021	-.00094	.00124	4.9623	-.01264	.00251	10.436	.00311	.00033	-.12003			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3004.3	50858.	6060.1										
Stddev	10.8	99.	38.1										
%RSD	.35997	.19437	.62835										
#1	3012.0	50788.	6033.2										
#2	2996.7	50927.	6087.1										

Sample Name: CCV-3296664 Acquired: 5/30/2015 12:58:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49949	.53214	.99200	.51147	.49188	.49032	.00047	5.0285	.49992	.51079	.51522	.49725	2.5043
Stddev	.00322	.00508	.01175	.00148	.00043	.00063	.00012	.0114	.00110	.00423	.00403	.00067	.0048
%RSD	.64377	.95512	1.1845	.28910	.08766	.12789	26.446	.22630	.22016	.82811	.78142	.13476	.19136
#1	.49722	.53573	1.0003	.51252	.49218	.49077	.00038	5.0365	.50070	.50780	.51237	.49677	2.5009
#2	.50176	.52854	.98370	.51043	.49157	.48988	.00056	5.0204	.49914	.51378	.51807	.49772	2.5077

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.254	.98758	20.138	.50473	.49779	5.0079	.50394	1.0102	1.0054	.00207	.99724	.99198	4.9809
Stddev	.028	.00392	.053	.00042	.00404	.0179	.00392	.0099	.0114	.00145	.01377	.00808	.0122
%RSD	.05720	.39734	.26550	.08301	.81152	.35665	.77762	.97894	1.1330	70.040	1.3813	.81405	.24409
#1	49.274	.98481	20.100	.50444	.49494	5.0205	.50116	1.0032	.99739	.00309	.98750	.98627	4.9895
#2	49.234	.99036	20.176	.50503	.50065	4.9952	.50671	1.0172	1.0135	.00104	1.0070	.99769	4.9723

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.659	1.0143	.49205	-.00091	.50236	1.0223	-.02086	.50848	.50560	.49533
Stddev	.026	.0138	.00072	.00076	.00115	.0093	.03830	.00041	.00538	.00297
%RSD	.24409	1.3599	.14600	84.062	.22809	.90814	183.63	.08142	1.0632	.59950
#1	10.677	1.0045	.49255	-.00037	.50155	1.0158	-.04793	.50878	.50940	.49323
#2	10.641	1.0240	.49154	-.00144	.50317	1.0289	.00622	.50819	.50179	.49743

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3061.3	51782.	6029.9										
Stddev	1.0	2.	15.3										
%RSD	.03207	.00340	.25341										
#1	3060.6	51784.	6019.1										
#2	3062.0	51781.	6040.8										

Sample Name: CCB Acquired: 5/30/2015 13:00:36 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00026	Al1670 ppm .00179	As1890 ppm -.00038	B_2089 ppm .00815	Ba4554 ppm -.00003	Be3130 ppm -.00006	Bi2230 ppm -.00080	Ca3179 ppm .00479	Cd2288 ppm -.00013	Co2286 ppm .00008	Cr2055 ppm -.00017	Cu3247 ppm -.00058	Fe2599 ppm .00240
#1	-.00049	.00197	.00013	.00861	-.00001	-.00001	-.00077	.01077	-.00005	.00006	-.00026	-.00060	.00270
#2	-.00003	.00162	-.00089	.00770	-.00004	-.00011	-.00082	-.00119	-.00020	.00009	-.00009	-.00056	.00211
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.04395	Li6707 ppm -.00164	Mg2790 ppm .00190	Mn2576 ppm -.00003	Mo2020 ppm .00037	Na5895 ppm -.01274	Ni2316 ppm .00015	P_1782 ppm .00417	Pb2203 ppm -.00193	S_1820 ppm .00355	Sb2068 ppm -.00171	Se1960 ppm -.00089	Si2881 ppm -.01824
#1	-.05811	-.00206	.00106	.00004	.00027	-.00330	.00024	.00555	-.00147	.00667	-.00142	-.00062	-.02432
#2	-.02980	-.00121	.00274	-.00010	.00047	-.02218	.00007	.00279	-.00240	.00044	-.00199	-.00116	-.01216
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.03902	Sn1899 ppm .00134	Sr4077 ppm .00014	Th2837 ppm .00194	Ti3349 ppm -.00001	TI1908 ppm .00112	U_3701 ppm -.02074	V_2924 ppm -.00053	Zn2062 ppm -.00007	Zr3391 ppm -.00197			
#1	-.05204	.00106	.00023	.00102	-.00030	.00077	-.01814	-.00043	.00025	-.00230			
#2	-.02601	.00162	.00005	.00286	.00029	.00147	-.02335	-.00064	-.00039	-.00164			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3093.7	Y_3600 Cts/S 53215.	Y_3774 Cts/S 6124.7										
#1	3098.7	53359.	6099.7										
#2	3088.7	53070.	6149.6										

Sample Name: CCVL3301032 Acquired: 5/30/2015 13:02:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00962	.10975	.01223	.11065	.01001	.00086	.10251	.21271	.00521	.01053	.01069	.01548	.10436
Stddev	.00017	.00037	.00355	.00146	.00020	.00001	.00282	.00316	.00006	.00026	.00026	.00016	.00113
%RSD	1.7220	.33651	29.000	1.3182	2.0326	.75117	2.7482	1.4875	1.1662	2.4948	2.4087	1.0142	1.0808
#1	.00974	.10949	.01473	.10962	.01016	.00086	.10051	.21494	.00525	.01035	.01087	.01559	.10516
#2	.00951	.11001	.00972	.11168	.00987	.00085	.10450	.21047	.00516	.01072	.01051	.01537	.10357
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	3.0242	.00896	.21470	.01059	.01969	1.0291	.04176	2.9692	.00810	-.00103	.00884	.01401	.47779
Stddev	.0706	.00081	.00258	.00004	.00024	.0226	.00016	.0376	.00029	.00140	.00274	.00008	.00575
%RSD	2.3347	9.0202	1.2028	.39910	1.2096	2.1943	.39444	1.2648	3.5543	136.43	30.946	.58047	1.2043
#1	3.0741	.00953	.21288	.01056	.01952	1.0450	.04164	2.9426	.00789	-.00004	.01077	.01395	.48186
#2	2.9742	.00839	.21653	.01062	.01986	1.0131	.04188	2.9957	.00830	-.00202	.00690	.01406	.47372
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	1.0225	.10246	.01024	.01602	.01047	.01600	.07112	.01051	.02178	.01364			
Stddev	.0123	.00133	.00004	.00142	.00019	.00076	.00376	.00042	.00004	.00327			
%RSD	1.2043	1.3017	.40270	8.8738	1.8376	4.7243	5.2833	3.9944	.18672	24.002			
#1	1.0312	.10152	.01027	.01502	.01033	.01546	.06846	.01021	.02175	.01595			
#2	1.0138	.10341	.01021	.01703	.01060	.01653	.07377	.01081	.02181	.01132			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3094.1	52901.	6032.1										
Stddev	8.5	151.	21.1										
%RSD	.27580	.28630	.35048										
#1	3088.1	52793.	6047.0										
#2	3100.1	53008.	6017.1										

Sample Name: MB 280-278175/1-A Acquired: 5/30/2015 13:05:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278175 6010C soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	.01696	-.00105	.01858	.00076	-.00025	-.00048	F .22746	-.00039
Stddev	.00007	.00004	.00014	.00037	.00057	.00011	.00010	.00219	.00000
%RSD	8.2445	.24863	12.955	1.9888	74.062	46.225	20.888	.96433	1.0530
#1	-.00077	.01698	-.00095	.01884	.00116	-.00033	-.00055	.22901	-.00039
#2	-.00087	.01693	-.00115	.01832	.00036	-.00017	-.00041	.22591	-.00039
Check ?	Chk Pass	Chk Fail	Chk Pass						
High Limit								.20000	
Low Limit								-.20000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.00009	.00117	.02727	-.01619	-.00118	.09217	.00078	.00053
Stddev	.00028	.00026	.00026	.00069	.02508	.00002	.00049	.00005	.00050
%RSD	521.83	294.50	21.872	2.5382	154.97	1.8201	.53697	5.8797	94.783
#1	-.00014	.00027	.00135	.02776	.00155	-.00119	.09182	.00081	.00089
#2	.00025	-.00010	.00099	.02678	-.03392	-.00116	.09252	.00075	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11791	-.00002	.01710	-.00163	.00561	-.00118	.00223	.05018	.10739
Stddev	.00524	.00007	.00170	.00192	.00383	.00380	.00436	.00360	.00770
%RSD	4.4457	413.81	9.9344	117.47	68.290	322.91	194.94	7.1723	7.1723
#1	.11420	.00003	.01830	-.00299	.00290	.00151	.00532	.04764	.10195
#2	.12162	-.00006	.01590	-.00028	.00832	-.00386	-.00085	.05273	.11284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00831	.00056	.00060	.00025	-.00124	.01836	.00000	.00290	.00057
Stddev	.00044	.00006	.00169	.00000	.00302	.01438	.0001	.00007	.00049
%RSD	5.2961	10.866	279.65	.64424	243.20	78.321	5567.3	2.5660	85.916
#1	.00800	.00060	.00180	.00025	.00089	.00819	-.00011	.00284	.00022
#2	.00862	.00052	-.00059	.00026	-.00338	.02853	.00010	.00295	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3150.2	54143.	6150.6						
Stddev	5.7	106.	8.0						
%RSD	.18002	.19519	.13019						
#1	3146.2	54068.	6144.9						
#2	3154.2	54217.	6156.2						

Sample Name: 280-69335-A-1-A MDLV Acquired: 5/30/2015 13:08:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 278175 6010C soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00539	.07626	.02432	.05347	.00382	.00097	.01879	.71548	.00129
Stddev	.00018	.00007	.00007	.00031	.00024	.00004	.00142	.00131	.00003
%RSD	3.4262	.09145	.29112	.58718	6.1983	4.0887	7.5580	.18316	2.5269
#1	.00552	.07621	.02427	.05370	.00399	.00094	.01779	.71641	.00127
#2	.00526	.07631	.02437	.05325	.00366	.00100	.01979	.71455	.00131
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00414	.00225	.00907	.16866	1.5817	.00971	.22810	.00459	.00887
Stddev	.00012	.00024	.00011	.00058	.0200	.00264	.00084	.00002	.00042
%RSD	2.9132	10.812	1.2136	.34442	1.2636	27.217	.36728	.35063	4.7033
#1	.00406	.00208	.00900	.16825	1.5676	.01158	.22869	.00458	.00858
#2	.00423	.00243	.00915	.16907	1.5959	.00784	.22750	.00460	.00917
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0952	.00464	.07280	.01063	.14943	.01409	.03138	.22482	.48112
Stddev	.0027	.00027	.00046	.00329	.00035	.00088	.00000	.00927	.01983
%RSD	.12843	5.7480	.62762	30.981	.23729	6.2306	.00611	4.1226	4.1226
#1	2.0933	.00483	.07312	.00830	.14918	.01471	.03138	.21827	.46709
#2	2.0971	.00445	.07247	.01296	.14968	.01347	.03138	.23138	.49515
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04402	.00158	.01616	.00522	.02525	-.01876	.00259	.01788	.01124
Stddev	.00102	.00003	.00228	.00000	.00149	.02260	.00049	.00120	.00011
%RSD	2.3262	2.0382	14.119	.04817	5.8970	120.52	18.909	6.6879	1.0022
#1	.04475	.00160	.01455	.00522	.02630	-.00277	.00224	.01703	.01132
#2	.04330	.00156	.01778	.00521	.02420	-.03474	.00294	.01873	.01116
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3132.7	53463.	6172.8						
Stddev	.6	30.	11.4						
%RSD	.01783	.05695	.18491						
#1	3133.1	53485.	6180.8						
#2	3132.3	53442.	6164.7						

Sample Name: 280-69335-A-2-A MDLV Acquired: 5/30/2015 13:10:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 278175 6010C soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00615	.07676	.02640	.05269	.00381	.00096	.01933	.68455	.00136
Stddev	.00027	.00068	.00317	.00005	.00027	.00004	.00051	.00944	.00015
%RSD	4.3368	.88923	11.993	.09012	7.0967	3.7478	2.6359	1.3797	10.876
#1	.00634	.07724	.02864	.05272	.00362	.00099	.01969	.67787	.00125
#2	.00596	.07628	.02416	.05266	.00400	.00094	.01897	.69123	.00146
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00372	.00240	.00854	.16223	1.5553	.01019	.21707	.00422	.00918
Stddev	.00001	.00006	.00023	.00225	.0493	.00074	.00018	.00001	.00027
%RSD	.30221	2.4697	2.7151	1.3864	3.1696	7.2959	.08062	.30767	2.9191
#1	.00373	.00236	.00837	.16064	1.5204	.01072	.21720	.00421	.00899
#2	.00371	.00244	.00870	.16382	1.5902	.00966	.21695	.00423	.00937
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0763	.00433	.07438	.00949	.14796	.01165	.03277	.22224	.47559
Stddev	.0418	.00024	.00089	.00127	.00593	.00131	.00360	.00448	.00959
%RSD	2.0117	5.5992	1.1968	13.376	4.0088	11.279	10.973	2.0168	2.0168
#1	2.0467	.00450	.07375	.01038	.14376	.01072	.03531	.22541	.48238
#2	2.1058	.00416	.07501	.00859	.15215	.01258	.03023	.21907	.46881
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04519	.00153	.01558	.00504	.02541	-.00318	.00297	.01813	.01159
Stddev	.00279	.00017	.00030	.00011	.00120	.00498	.00031	.00072	.00012
%RSD	6.1728	10.979	1.9348	2.1819	4.7338	156.41	10.435	3.9651	1.0096
#1	.04321	.00142	.01579	.00496	.02456	.00034	.00275	.01762	.01167
#2	.04716	.00165	.01537	.00512	.02626	-.00670	.00319	.01864	.01151
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3108.3	53492.	6179.6						
Stddev	5.2	127.	37.6						
%RSD	.16815	.23723	.60834						
#1	3112.0	53403.	6206.2						
#2	3104.6	53582.	6153.0						

Sample Name: 280-69335-A-3-A LOQV Acquired: 5/30/2015 13:13:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 278175 6010C soil

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.01392	.53012	.02356	.11447	.02042	.00451	-.00016	1.2279	.00481
#2	.01399	.52884	.02769	.11492	.02062	.00441	-.00454	1.2047	.00490
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.01020	.03579	.05141	.81187	2.9914	.01334	.38867	.04601	.02357
#2	.00961	.03603	.04862	.79888	2.8767	.01258	.37487	.04455	.02438
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	4.8810	.03982	.50105	.00739	.00809	.01713	.02695	.99638	2.1322
#2	.0074	.00014	.00304	.00108	.00556	.00209	.00459	.02638	.0564
	.15098	.36203	.60733	14.610	68.681	12.223	17.028	2.6471	2.6471
#1	4.8863	.03972	.49890	.00663	.01202	.01565	.03020	1.0150	2.1722
#2	4.8758	.03993	.50320	.00815	.00416	.01861	.02371	.97773	2.0923
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.11009	.01022	.14431	.00942	.02876	.00120	.01897	.08164	.02392
#2	.00092	.00013	.00265	.00002	.00209	.01392	.00003	.00058	.00093
	.83993	1.3070	1.8348	.25223	7.2562	1163.4	.15212	.70864	3.8901
#1	.10944	.01032	.14618	.00943	.02728	-.00865	.01899	.08205	.02458
#2	.11075	.01013	.14244	.00940	.03023	.01104	.01895	.08123	.02326
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
		Cts/S	Cts/S						
	3093.6	53652.	6171.2						
	4.5	533.	2.1						
#1	3096.7	53275.	6169.7						
#2	3090.4	54028.	6172.7						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 13:16:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00761	Al3092 ppm 49.504	As1890 ppm .00024	B_2089 ppm .00375	Ba4554 ppm .00035	Be3130 ppm -.00016	Bi2230 ppm 1.0137	Ca3179 ppm .03436	Cd2288 ppm -.00071	Co2286 ppm -.00044	Cr2055 ppm .00055
#1	-.00739	49.853	.00111	.00462	.00042	-.00021	1.0133	.03517	-.00062	-.00046	.00073
#2	-.00783	49.156	-.00062	.00287	.00028	-.00011	1.0141	.03356	-.00080	-.00042	.00037
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00100	Fe2714 ppm 50.037	K_7664 ppm -.07384	Li6707 ppm .00083	Mg2790 ppm .03612	Mn2576 ppm -.00145	Mo2020 ppm -.00070	Na8183 ppm 245.53	Ni2316 ppm .00243	P_1782 ppm .00551	Pb2203 ppm -.00114
#1	.00076	50.412	-.08103	.00157	.03965	-.00139	-.00065	247.33	.00216	.00389	-.00113
#2	.00124	49.662	-.06666	.00008	.03259	-.00151	-.00075	243.73	.00271	.00713	-.00116
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.1967	Sb2068 ppm -.01197	Se1960 ppm .00771	Si2881 ppm -.04983	SiO2 ppm -.10664	Sn1899 ppm -.00178	Sr4077 ppm .00031	Th2837 ppm 4.9912	Ti3349 ppm -.01378	TI1908 ppm .00222	U_3701 ppm W 10.518
#1	5.0820	-.01007	.00837	-.04084	-.08739	-.00086	.00017	4.9733	-.01338	.00107	10.497
#2	5.3114	-.01387	.00705	-.05882	-.12588	-.00270	.00044	5.0091	-.01418	.00337	10.539
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00300	Zn2062 ppm -.00056	Zr3391 ppm -.12556								
#1	.00252	-.00013	-.12080								
#2	.00349	-.00099	-.13032								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2963.2	Y_3600 Cts/S 49660.	Y_3774 Cts/S 6018.9								
#1	2968.8	49896.	5997.8								
#2	2957.7	49425.	6040.0								

Sample Name: CCV-3296664 Acquired: 5/30/2015 13:18:51 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.50481	.53816	.99950	.51078	.49049	.48981	-.00143	5.0136	.50578	.50888	.50813	.50557	2.5143
Stddev	.00340	.00737	.00298	.00028	.01070	.01186	.00034	.1166	.00629	.00090	.00554	.00477	.0637
%RSD	.67350	1.3687	.29769	.05402	2.1818	2.4221	23.787	2.3260	1.2437	.17686	1.0908	.94437	2.5344
#1	.50721	.54337	.99739	.51058	.48292	.48142	-.00119	4.9312	.51023	.50952	.50421	.50894	2.4692
#2	.50240	.53295	1.0016	.51097	.49806	.49820	-.00167	5.0961	.50133	.50824	.51205	.50219	2.5594
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.191	.98723	20.242	.50927	.49749	5.0378	.50340	1.0105	1.0014	.00396	.99836	.98383	4.9477
Stddev	1.185	.02088	.231	.00589	.00230	.1160	.00014	.0043	.0041	.00309	.00355	.00724	.1194
%RSD	2.4087	2.1149	1.1396	1.1564	.46320	2.3026	.02817	.42650	.41079	78.004	.35563	.73546	2.4130
#1	48.353	.97247	20.405	.51343	.49912	4.9558	.50350	1.0074	1.0043	.00615	1.0009	.98894	4.8632
#2	50.029	1.0020	20.079	.50510	.49586	5.1198	.50330	1.0135	.99846	.00178	.99585	.97871	5.0321
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.588	1.0074	.49050	.00041	.50562	1.0144	-.02067	.51623	.51803	.49675			
Stddev	.255	.0020	.01064	.00428	.00598	.0027	.02702	.00494	.00207	.01182			
%RSD	2.4130	.20076	2.1692	1041.3	1.1823	.26383	130.71	.95777	.39967	2.3797			
#1	10.407	1.0088	.48298	.00344	.50985	1.0163	-.03977	.51973	.51949	.48839			
#2	10.769	1.0060	.49802	-.00262	.50139	1.0125	-.00157	.51274	.51657	.50511			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3014.3	51104.	6006.0										
Stddev	30.3	295.	135.4										
%RSD	1.0040	.57802	2.2546										
#1	2992.9	50895.	6101.8										
#2	3035.7	51313.	5910.3										

Sample Name: CCB Acquired: 5/30/2015 13:21:21 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00036	Al1670 ppm .00057	As1890 ppm .00251	B_2089 ppm .00298	Ba4554 ppm -.00013	Be3130 ppm -.00015	Bi2230 ppm -.00093	Ca3179 ppm .00191	Cd2288 ppm -.00027	Co2286 ppm .00007	Cr2055 ppm .00015	Cu3247 ppm -.00050	Fe2599 ppm .00155
#1	-.00049	.00055	.00001	.00343	-.00009	-.00011	-.00131	.00111	-.00034	.00012	.00002	-.00077	.00153
#2	-.00024	.00060	.00501	.00253	-.00016	-.00019	-.00056	.00271	-.00020	.00002	.00028	-.00023	.00157
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.03447	Li6707 ppm -.00218	Mg2790 ppm -.00131	Mn2576 ppm .00000	Mo2020 ppm .00021	Na5895 ppm .00706	Ni2316 ppm -.00033	P_1782 ppm .00052	Pb2203 ppm -.00029	S_1820 ppm -.00041	Sb2068 ppm -.00083	Se1960 ppm -.00077	Si2881 ppm -.01838
#1	-.01087	-.00198	-.00282	.00001	.00042	.01544	-.00008	-.00032	.00045	.00399	-.00067	-.00190	-.01114
#2	-.05808	-.00237	.00021	-.00001	.00001	-.00131	-.00059	.00136	-.00102	-.00481	-.00099	.00035	-.02562
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.03933	Sn1899 ppm .00040	Sr4077 ppm .00011	Th2837 ppm .00278	Ti3349 ppm .00023	TI1908 ppm .00130	U_3701 ppm -.04041	V_2924 ppm .00023	Zn2062 ppm .00062	Zr3391 ppm -.00102			
#1	-.02384	-.00010	.00004	.00370	.00011	-.00085	-.05696	-.00002	.00081	-.00016			
#2	-.05482	.00090	.00018	.00187	.00035	.00344	-.02386	.00047	.00044	-.00187			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3053.0	Y_3600 Cts/S 52357.	Y_3774 Cts/S 5996.2										
#1	3044.5	52398.	5997.0										
#2	3061.5	52316.	5995.3										

Sample Name: CCVL3301032 Acquired: 5/30/2015 13:23:43 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00956 .10878	.00025 .01378	.00143 .10561	.00116 .01016	.00012 .00086	.00015 .10516	.00207 .20768	.00021 .00506	.00001 .01080	.00004 .01062	.00005 .01062	.00108 .01550
Stddev	.00008 .81347	.00025 .23303	.00143 10.391	.00116 1.1003	.00012 1.2056	.00015 17.470	.00207 1.9728	.00021 1.0618	.00001 .12650	.00004 .40263	.00005 .45862	.00108 6.9716
%RSD												

#1	.00961	.10896	.01276	.10479	.01007	.00076	.10369	.20924	.00506	.01077	.01066	.01626
#2	.00950	.10860	.01479	.10643	.01025	.00097	.10663	.20612	.00505	.01083	.01059	.01473

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10001 3.0186	.00977 .00977	.00030 .20991	.00017 .01065	.00015 .02043	.00011 1.0365	.0039 .04235	.00005 .29801	.0147 .00768	.00200 .00325	.00352 F .00660	.00154
Stddev	.00039 .39249	.0453 1.5001	.00030 3.0243	.00017 .07902	.00015 1.3740	.00011 .55995	.0039 .37382	.01234 .11234	.49221 26.078	.00200 108.36	.00352 23.338	
%RSD												

#1	.10029	3.0506	.00997	.21003	.01075	.02035	1.0392	.04239	2.9697	.00626	.00574	.00769
#2	.09974	2.9866	.00956	.20979	.01054	.02051	1.0338	.04232	2.9905	.00909	.00076	.00551

Check ? Value Range	Chk Pass	None	Chk Fail .01000 -30.000%									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01447 .47889	.00029 1.0248	.00311 .10389	.0067 .01031	.00020 .01764	.00016 .01049	.00178 .01629	.00017 F .03575	.00421 .00994	.00059 .02085	.00014 .01376	.00128
Stddev	.00029 2.0158	.00311 .65036	.0067 .65036	.00020 .18958	.00016 1.5124	.00178 10.106	.00017 1.6420	.00421 25.876	.00059 1.6606	.00014 1.3892	.00128 6.1254	.00213
%RSD												

#1	.01426	48109	1.0295	.10375	.01042	.01638	0.1037	.01331	.03533	.00984	.01994	.01526
#2	.01467	.47669	1.0201	.10403	.01020	.01890	.01061	.01926	.03617	.01004	.02175	.01225

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass								
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3096.3 12.7	52975. 1032.	6185.0 70.2										
Stddev	.41030 1.9474		1.1356 6234.7										
%RSD													

#1	3087.3	52246.	6135.4										
#2	3105.3	53705.	6234.7										

Sample Name: Al-500 Acquired: 5/30/2015 13:26:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	W 511.70	.00806	-.00115	-.00033	-.00017	-.00186	.00605	-.00022
Stddev	.00022	1.56	.00095	.00011	.00029	.00003	.00215	.00406	.00016
%RSD	35.387	.30535	11.746	9.8259	87.288	19.668	115.70	67.138	73.709
#1	-.00048	510.59	.00739	-.00107	-.00013	-.00019	-.00034	.00892	-.00011
#2	-.00079	512.80	.00873	-.00123	-.00054	-.00014	-.00339	.00318	-.00033
Check ?	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00087	.00059	.00170	-.07151	.00003	.00330	.00056	-.00142
Stddev	.00032	.00035	.00033	.00076	.03149	.00031	.00761	.00002	.00037
%RSD	253.33	40.186	55.138	44.297	44.031	1017.7	230.79	2.6771	26.217
#1	-.00010	.00112	.00082	.00224	-.04925	.00025	.00868	.00057	-.00116
#2	.00035	.00062	.00036	.00117	-.09378	-.00019	-.00208	.00055	-.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01159	-.00125	.00031	-.00151	-.05436	-.00233	.00720	-.03264	-.06986
Stddev	.00144	.00081	.00019	.00230	.00338	.00376	.00335	.00161	.00344
%RSD	12.414	64.544	61.719	151.94	6.2202	161.55	46.497	4.9265	4.9265
#1	-.01260	-.00182	.00018	-.00314	-.05676	.00033	.00483	-.03378	-.07229
#2	-.01057	-.00068	.00045	.00011	-.05197	-.00499	.00957	-.03151	-.06742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.00014	.00040	.00058	.00434	-.00816	-.00026	.00062	.00145
Stddev	.00273	.00002	.00080	.00037	.00198	.00043	.00001	.00038	.00074
%RSD	1036.5	11.372	201.92	62.967	45.720	5.2101	4.8435	62.356	51.064
#1	-.00166	.00015	.00096	.00032	.00294	-.00786	-.00027	.00089	.00198
#2	.00219	.00013	-.00017	.00084	.00574	-.00846	-.00026	.00034	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3057.3	50202.	6270.6						
Stddev	3.6	262.	35.2						
%RSD	.11669	.52259	.56157						
#1	3059.8	50387.	6295.5						
#2	3054.8	50016.	6245.7						

Sample Name: Fe-200 Acquired: 5/30/2015 13:29:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	F -.10542	.00134	-.00134	-.00022	-.00020	-.00461	.00326	-.00016
Stddev	.00006	.00219	.00228	.00132	.00021	.00012	.00308	.00041	.00012
%RSD	83.541	2.0791	170.63	98.321	95.634	58.224	66.660	12.682	76.113
#1	.00003	-.10387	.00295	-.00228	-.00007	-.00012	-.00244	.00355	-.00008
#2	.00011	-.10697	-.00028	-.00041	-.00036	-.00029	-.00679	.00297	-.00025
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		3.2000							
Low Limit		-.10000							
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.00082	-.00085	196.41	-.14340	-.00288	-.00205	.00229	-.00103
Stddev	.00001	.00023	.00040	.25	.01791	.00127	.00662	.00006	.00017
%RSD	1.9923	28.000	47.082	.12805	12.493	44.111	322.59	2.7269	16.395
#1	.00036	.00065	-.00057	196.59	-.13073	-.00199	.00263	.00234	-.00115
#2	.00035	.00098	-.00114	196.23	-.15606	-.00378	-.00673	.00225	-.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01825	.00576	.00144	-.00123	-.00784	W -.01847	.00002	-.01406	-.03010
Stddev	.00275	.00017	.00330	.00046	.00091	.00070	.00173	.00464	.00993
%RSD	15.068	2.9946	228.78	37.526	11.561	3.7680	10572.	33.002	33.002
#1	-.01630	.00564	-.00089	-.00156	-.00848	-.01896	.00124	-.01735	-.03712
#2	-.02019	.00588	.00378	-.00090	-.00720	-.01797	-.00121	-.01078	-.02307
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass				
High Limit						2.0000			
Low Limit						-.01000			
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00198	.00005	.02521	-.00034	.00350	F -.17466	.00018	-.00153	-.00528
Stddev	.00004	.00006	.00469	.00029	.00157	.03524	.00033	.00013	.00017
%RSD	1.9533	105.82	18.583	84.873	44.831	20.179	180.73	8.3002	3.1907
#1	.00201	.00001	.02853	-.00054	.00461	-.19958	-.00005	-.00162	-.00540
#2	.00195	.00009	.02190	-.00013	.00239	-.14974	.00041	-.00144	-.00516
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass				
High Limit						50.000			
Low Limit						-.10000			
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3107.1	54093.	6361.1						
Stddev	8.7	348.	3.8						
%RSD	.27840	.64316	.06022						
#1	3101.0	53847.	6358.4						
#2	3113.2	54339.	6363.8						

Sample Name: MB 280-279236/1-A Acquired: 5/30/2015 13:32:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/28 Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00949	-.00136	.00074	.00022	-.00017	.00194	.03733	-.00032
Stddev	.00066	.00082	.00033	.00016	.00011	.00007	.00046	.00054	.00014
%RSD	178.00	8.6541	24.566	21.765	51.957	42.301	23.428	1.4522	43.636
#1	.00010	.01007	-.00159	.00063	.00014	-.00012	.00226	.03772	-.00042
#2	-.00083	.00891	-.00112	.00086	.00029	-.00022	.00162	.03695	-.00022
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	-.00021	-.00060	.02504	-.07619	-.00128	.00789	.00012	.00019
Stddev	.00022	.00007	.00030	.00762	.02509	.00064	.00068	.00001	.00012
%RSD	1033.3	32.527	49.257	30.427	32.935	50.229	8.6756	6.6726	62.181
#1	.00018	-.00026	-.00081	.03043	-.05845	-.00174	.00837	.00012	.00011
#2	-.00014	-.00016	-.00039	.01965	-.09393	-.00083	.00741	.00013	.00027
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10933	-.00004	.00045	-.00069	.04291	-.00314	.00064	-.02261	-.04838
Stddev	.00043	.00022	.00475	.00003	.00262	.00318	.00323	.00642	.01375
%RSD	.39081	513.56	1046.2	3.9535	6.0962	101.22	507.16	28.416	28.416
#1	.10963	-.00020	-.00291	-.00067	.04106	-.00089	-.00165	-.01807	-.03866
#2	.10902	.00011	.00381	-.00071	.04476	-.00539	.00292	-.02715	-.05811
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00013	.00238	.00032	.00001	-.04518	-.00016	.00355	-.00098
Stddev	.00016	.00005	.00012	.00002	.00009	.00169	.00030	.00029	.00039
%RSD	101.14	36.475	4.9818	5.9511	641.45	3.7489	188.49	8.0408	39.204
#1	.00004	.00016	.00229	.00034	-.00005	-.04399	.00005	.00335	-.00071
#2	.00026	.00010	.00246	.00031	.00007	-.04638	-.00037	.00375	-.00126
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3172.9	54981.	6380.5						
Stddev	6.4	100.	4.5						
%RSD	.20219	.18189	.07014						
#1	3177.4	55052.	6377.3						
#2	3168.4	54910.	6383.7						

Sample Name: 280-69749-A-1-B Acquired: 5/30/2015 13:34:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00090	As1890 ppm .53393	B_2089 ppm .00090	Ba4554 ppm .00550	Be3130 ppm .01563	Bi2230 ppm .00004	Ca3179 ppm 2.5175	Cd2288 ppm -.00031
#1	-.00085	.53109	.00133	.00521	.01555	-.00003	.00078	2.4855	-.00033
#2	-.00094	.53676	.00047	.00580	.01570	.00011	.00122	2.5494	-.00029
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00027	Cu3247 ppm .00070	Fe2599 ppm .00038	K_7664 ppm .75118	Li6707 ppm .07538	Mg2790 ppm -.00081	Mn2576 ppm .49515	Mo2020 ppm .01490
#1	.00033	.00096	.00043	.73730	.05987	-.00058	.48987	.01462	-.00011
#2	.00021	.00045	.00033	.76506	.09089	-.00104	.50043	.01518	-.00009
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .58375	P_1782 ppm .00092	Pb2203 ppm .01803	S_1820 ppm .0022	Sb2068 ppm .38501	Se1960 ppm .00014	Si2881 ppm .00227	SiO2 ppm 1.1012
#1	.56916	.00117	.02021	.00070	.38266	-.00053	.00642	1.0750	2.3004
#2	.59834	.00068	.01584	-.00027	.38736	.00081	-.00189	1.1275	2.4128
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00032	Th2837 ppm .01686	Ti3349 ppm .00385	Tl1908 ppm .00525	U_3701 ppm -.00153	V_2924 ppm -.02557	Zn2062 ppm .00200	Zr3391 ppm .00479
#1	.00029	.01657	.00450	.00522	-.00085	-.03733	.00165	.00438	.00017
#2	.00034	.01715	.00320	.00528	-.00221	-.01381	.00235	.00521	-.00070
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3157.2	Y_3774 Cts/S 53940.	377.433 {89}					
#1	3161.9	54760.	6426.0						
#2	3152.5	53121.	6398.1						

Sample Name: 280-69749-A-2-G Acquired: 5/30/2015 13:37:12 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00035	12.926	.00299	.01095	.35519	.00169	.00149	16.508	.00035
#2	-.00034	12.796	.00131	.01068	.34885	.00153	.00174	16.244	.00040
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00562	.00855	.01733	9.1719	1.4928	.00061	3.3022	.42213	.00007
#2	.00573	.00866	.01772	9.0548	.76688	132.41	1.0560	.00440	.00014
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	25.816	.00791	.27541	.01613	.66697	-.00196	-.00457	11.211	23.991
#2	25.110	.00787	.26909	.01787	.66736	-.00886	.00139	10.878	23.280
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00086	.12869	.00410	.02680	.00090	-.02134	.01851	.03063	-.00314
#2	.00195	.12680	.00202	.02656	-.00353	-.02299	.01833	.02865	-.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3165.9	54483.	6409.3						
#2	3174.6	54196.	6485.7						

Sample Name: 280-69749-A-11-B Acquired: 5/30/2015 13:39:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.13473	-.00153	.00200	.00425	-.00017	.00118	3.0323	-.00022
Stddev	.00016	.00179	.00068	.00020	.00018	.00002	.00016	.0386	.00012
%RSD	681.89	1.3300	44.473	10.049	4.3221	10.579	13.457	1.2731	55.768
#1	.00014	.13600	-.00105	.00215	.00412	-.00016	.00129	3.0596	-.00031
#2	-.00009	.13347	-.00202	.00186	.00438	-.00019	.00106	3.0050	-.00013
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00046	.00025	.21625	.08910	-.00231	.86353	.00194	.00020
Stddev	.00045	.00014	.00076	.00159	.02964	.00039	.01229	.00002	.00035
%RSD	168.12	30.448	310.24	.73303	33.264	16.795	1.4232	.97513	179.64
#1	-.00005	.00056	-.00029	.21737	.06814	-.00203	.85484	.00195	.00045
#2	.00059	.00036	.00078	.21513	.11006	-.00258	.87222	.00192	-.00005
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.6699	-.00015	.00560	-.00101	1.0943	-.00250	.00175	.57293	1.2261
Stddev	.0909	.00009	.00040	.00020	.0128	.00260	.00213	.01784	.0382
%RSD	3.4042	62.405	7.2104	19.785	1.1716	104.20	121.96	3.1137	3.1137
#1	2.7342	-.00008	.00532	-.00087	1.1033	-.00066	.00024	.58554	1.2531
#2	2.6057	-.00021	.00589	-.00115	1.0852	-.00434	.00326	.56031	1.1991
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	.03699	.00204	.01272	-.00176	-.01968	-.00008	.00020	.00026
Stddev	.00046	.00080	.00051	.00044	.00050	.00053	.00044	.00026	.00074
%RSD	47.014	2.1635	24.837	3.4877	28.126	2.7174	529.74	132.35	277.98
#1	.00130	.03756	.00168	.01303	-.00211	-.02006	.00023	.00039	-.00026
#2	.00065	.03643	.00239	.01241	-.00141	-.01930	-.00040	.00001	.00079
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3150.5	54086.	6342.1						
Stddev	8.3	94.	6.6						
%RSD	.26481	.17410	.10356						
#1	3144.6	54153.	6337.4						
#2	3156.4	54020.	6346.7						

Sample Name: 280-69749-A-12-E Acquired: 5/30/2015 13:42:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm 5.5259	As1890 ppm .00335	B_2089 ppm .00591	Ba4554 ppm .12472	Be3130 ppm .00052	Bi2230 ppm .00191	Ca3179 ppm 4.7103	Cd2288 ppm -.00010
#1	-.00035	5.5055	.00315	.00591	.12455	.00045	.00076	4.7059	-.00006
#2	-.00042	5.5463	.00356	.00592	.12489	.00058	.00306	4.7147	-.00014
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00474	Cu3247 ppm .02598	Fe2599 ppm 3.7015	K_7664 ppm 1.0145	Li6707 ppm .00161	Mg2790 ppm 1.2671	Mn2576 ppm .04572	Mo2020 ppm .00138
#1	.00151	.00497	.02563	3.6872	1.0448	.00107	1.2643	.04575	.00156
#2	.00171	.00451	.02632	3.7158	.98413	.00214	1.2700	.04569	.00120
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .00370	P_1782 ppm .05169	Pb2203 ppm .00914	S_1820 ppm .94581	Sb2068 ppm -.00417	Se1960 ppm .00176	Si2881 ppm 6.4188	SiO2 ppm 13.736
#1	13.953	.00390	.05522	.00935	.95023	-.00511	-.00251	6.4267	13.753
#2	14.357	.00349	.04816	.00892	.94139	-.00323	.00604	6.4108	13.719
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .07706	Th2837 ppm .00480	Ti3349 ppm .01991	Tl1908 ppm -.00057	U_3701 ppm -.03695	V_2924 ppm .00428	Zn2062 ppm .01426	Zr3391 ppm .00083
#1	.00022	.07739	.00375	.01977	-.00040	-.02700	.00419	.01454	.00128
#2	.00228	.07673	.00584	.02004	-.00075	-.04690	.00438	.01398	.00038
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 360.073 {94}	Y_3774 Cts/S 377.433 {89}						
#1	3160.6	54134.	6438.1						
#2	3147.1	54063.	6415.0						

Sample Name: 280-69774-A-1-B Acquired: 5/30/2015 13:45:06 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	.05540	-.00219	.00262	.00519	-.00013	.00112	2.3381	-.00023
Stddev	.00042	.00100	.00171	.00036	.00015	.00011	.00006	.0089	.00008
%RSD	62.103	1.8118	78.069	13.689	2.8083	83.329	5.7105	.38290	34.102
#1	-.00038	.05469	-.00339	.00287	.00508	-.00021	.00116	2.3318	-.00029
#2	-.00098	.05611	-.00098	.00237	.00529	-.00005	.00107	2.3445	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.00086	.00109	.06606	.07138	-.00334	.26181	.00191	.00065
Stddev	.00016	.00006	.00002	.00037	.02439	.00065	.00460	.00006	.00050
%RSD	101.12	7.2351	1.7448	.56550	34.173	19.393	1.7578	2.8872	76.700
#1	.00027	.00091	.00111	.06633	.05413	-.00380	.25856	.00187	.00030
#2	.00005	.00082	.00108	.06580	.08863	-.00289	.26506	.00195	.00100
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.2369	.00056	.00589	.00015	.66881	-.00198	.00087	.69291	1.4828
Stddev	.0104	.00005	.00403	.00001	.01763	.00389	.00349	.00043	.0009
%RSD	.32143	8.7355	68.430	6.4398	2.6353	196.31	403.08	.06177	.06177
#1	3.2296	.00052	.00304	.00014	.65635	-.00474	.00333	.69321	1.4835
#2	3.2443	.00059	.00873	.00016	.68128	.00077	-.00160	.69260	1.4822
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	.01253	.00239	.00047	.00098	-.01536	.00012	.00971	-.00091
Stddev	.00082	.00008	.00172	.00006	.00091	.01138	.00013	.00028	.00036
%RSD	72.499	.64380	71.828	12.821	93.134	74.119	115.56	2.9288	39.519
#1	.00171	.01248	.00118	.00043	.00162	-.02341	.00021	.00991	-.00066
#2	.00055	.01259	.00360	.00051	.00033	-.00731	.00002	.00951	-.00116
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3153.4	54122.	6398.9						
Stddev	5.1	88.	36.7						
%RSD	.16284	.16262	.57298						
#1	3157.0	54185.	6424.8						
#2	3149.8	54060.	6373.0						

Sample Name: 280-69774-A-1-B SD@5 Acquired: 5/30/2015 13:47:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	.01221	.00117	.00100	.00106	-.00020	.00022	.48780	-.00039
Stddev	.00009	.00068	.00018	.00083	.00043	.00004	.00196	.00077	.00030
%RSD	21.144	5.5587	15.517	82.782	40.107	19.240	876.12	.15748	77.318
#1	-.00037	.01269	.00104	.00159	.00136	-.00018	.00161	.48726	-.00061
#2	-.00051	.01173	.00130	.00042	.00076	-.00023	-.00116	.48835	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	-.00021	-.00005	.01974	-.05225	-.00178	.05550	.00039	.00014
Stddev	.00026	.00005	.00040	.00148	.04585	.00102	.00310	.00003	.00025
%RSD	162.72	22.345	852.81	7.4784	87.745	57.118	5.5764	8.5561	186.02
#1	-.00002	-.00025	.00023	.02078	-.01983	-.00250	.05769	.00041	.00031
#2	.00034	-.00018	-.00033	.01869	-.08467	-.00106	.05332	.00037	-.00004
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.64099	-.00053	.00216	-.00187	.12935	-.00377	.00297	.13689	.29294
Stddev	.01301	.00019	.00163	.00188	.00199	.00142	.00016	.00954	.02042
%RSD	2.0295	35.416	75.324	100.88	1.5388	37.654	5.5179	6.9695	6.9695
#1	.65019	-.00067	.00101	-.00320	.13076	-.00277	.00308	.14363	.30738
#2	.63179	-.00040	.00331	-.00053	.12794	-.00478	.00285	.13014	.27850
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.00271	.00223	.00020	-.00013	-.02935	.00011	.00241	-.00077
Stddev	.00031	.00006	.00279	.00036	.00074	.04712	.00016	.00039	.00010
%RSD	85.770	2.1103	125.01	181.25	579.65	160.55	141.42	16.134	12.479
#1	.00014	.00267	.00026	-.00006	.00040	.00397	.00000	.00214	-.00084
#2	.00058	.00275	.00420	.00045	-.00065	-.06267	.00022	.00269	-.00070
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3136.3	53954.	6305.2						
Stddev	5.9	40.	20.4						
%RSD	.18885	.07492	.32318						
#1	3132.2	53925.	6290.8						
#2	3140.5	53982.	6319.6						

Sample Name: 280-69774-A-1-C DU Acquired: 5/30/2015 13:50:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00050	As1890 ppm .04580	B_2089 ppm .00094	Ba4554 ppm .00132	Be3130 ppm .00428	Bi2230 ppm .00011	Ca3179 ppm 2.6718	Cd2288 ppm -.00006
#1	-.00050	.04553	-.00344	.00109	.00413	-.00009	.00338	2.6580	.00001
#2	-.00051	.04607	.00156	.00156	.00444	-.00013	.00148	2.6855	-.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00008	Cu3247 ppm .00036	Fe2599 ppm .00120	K_7664 ppm .06232	Li6707 ppm .05099	Mg2790 ppm -.00066	Mn2576 ppm .27205	Mo2020 ppm .00251
#1	.00022	.00020	.00128	.06123	.03139	-.00140	.27123	.00262	.00062
#2	-.00006	.00053	.00111	.06341	.07059	.00008	.27288	.00239	.00067
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 3.2433	P_1782 ppm .00032	Pb2203 ppm .00423	S_1820 ppm .00085	Sb2068 ppm .70093	Se1960 ppm -.00255	Si2881 ppm .70067	SiO2 ppm 1.4994
#1	3.2198	.00023	.00464	-.00007	.70739	-.00338	-.00117	.69956	1.4971
#2	3.2669	.00041	.00382	.00178	.69447	-.00172	.00073	.70178	1.5018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00064	Th2837 ppm .01389	Ti3349 ppm .00192	Tl1908 ppm .00065	U_3701 ppm -.00094	V_2924 ppm -.01837	Zn2062 ppm -.00057	Zr3391 ppm .00232
#1	.00051	.01375	.00220	.00034	-.00124	-.00409	-.00073	.00223	.00076
#2	.00076	.01404	.00164	.00095	-.00064	-.03265	-.00041	.00241	.00197
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3149.0	Y_3774 Cts/S 54152.	377.433 {89}	6334.1	12.	15.1	206.200 {163}	339.198 {99}
#1	3150.2	54161.	6344.8						
#2	3147.8	54143.	6323.4						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 13:52:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00638	49.735	-.00213	.00105	.00031	-.00009	1.0391	.03191	-.00016	-.00036	.00072	.00062	50.329
Stddev	.00006	.155	.00158	.00058	.00003	.00003	.0050	.00121	.00010	.00046	.00004	.00010	.109
%RSD	.90600	.31153	74.365	54.921	9.9045	30.816	.48113	3.8069	60.400	128.45	5.4721	15.767	.21678
#1	-.00634	49.626	-.00101	.00146	.00029	-.00007	1.0355	.03277	-.00023	-.00003	.00075	.00069	50.252
#2	-.00642	49.845	-.00325	.00065	.00033	-.00011	1.0426	.03105	-.00009	-.00069	.00069	.00055	50.406
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.03866	.00077	.04248	-.00147	-.00024	245.04	.00204	.00755	.00039	5.0951	-.01312	.00487	-.03769
Stddev	.03082	.00258	.00325	.00002	.00006	2.02	.00032	.00322	.00027	.0790	.00159	.00185	.00002
%RSD	79.716	333.94	7.6419	1.5828	25.897	.82626	15.916	42.624	68.979	1.5495	12.136	37.994	.04330
#1	-.01687	.00260	.04478	-.00145	-.00028	243.60	.00181	.00528	.00020	5.0392	-.01199	.00617	-.03770
#2	-.06045	-.00105	.04019	-.00149	-.00019	246.47	.00226	.00983	.00059	5.1509	-.01425	.00356	-.03768
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.08066	-.00146	.00033	4.9920	-.01307	.00074	10.464	.00216	-.00011	-.12256			
Stddev	.00003	.00134	.00003	.0122	.00019	.00079	.160	.00005	.00017	.00177			
%RSD	.04330	91.620	9.1997	.24485	1.4465	107.11	1.5254	2.1104	151.86	1.4405			
#1	-.08068	-.00241	.00031	5.0007	-.01321	.00018	10.351	.00213	-.00023	-.12380			
#2	-.08063	-.00052	.00035	4.9834	-.01294	.00130	10.577	.00219	.00001	-.12131			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3012.4	51400.	6252.6										
Stddev	1.3	36.	28.6										
%RSD	.04422	.07054	.45813										
#1	3013.3	51375.	6272.9										
#2	3011.5	51426.	6232.4										

Sample Name: CCV-3296664 Acquired: 5/30/2015 13:55:34 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .50541	Al1670 ppm .54424	As1890 ppm .99846	B_2089 ppm .51219	Ba4554 ppm .48814	Be3130 ppm .48720	Bi2230 ppm -.00063	Ca3179 ppm 4.9611	Cd2288 ppm .51086	Co2286 ppm .51420	Cr2055 ppm .52118	Cu3247 ppm .51050	Fe2599 ppm 2.4928
#1	.50213	.54624	1.0009	.51425	.48743	.48606	.00094	4.9518	.51279	.51549	.52228	.50859	2.4964
#2	.50869	.54225	.99600	.51014	.48885	.48835	-.00221	4.9705	.50894	.51292	.52008	.51241	2.4893
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm 48.983	Li6707 ppm .98766	Mg2790 ppm 19.909	Mn2576 ppm .50522	Mo2020 ppm .49944	Na5895 ppm 5.0089	Ni2316 ppm .50606	P_1782 ppm 1.0389	Pb2203 ppm 1.0158	S_1820 ppm .00391	Sb2068 ppm 1.0402	Se1960 ppm 1.0206	Si2881 ppm 4.9286
#1	48.940	.98634	19.831	.50458	.50093	5.0166	.50632	1.0374	1.0146	.00013	1.0330	1.0175	4.9220
#2	49.025	.98898	19.987	.50585	.49796	5.0012	.50580	1.0403	1.0170	.00768	1.0474	1.0238	4.9353
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 10.547	Sn1899 ppm 1.0258	Sr4077 ppm .49068	Th2837 ppm .00013	Ti3349 ppm .50152	TI1908 ppm 1.0472	U_3701 ppm -.02789	V_2924 ppm .50931	Zn2062 ppm .50374	Zr3391 ppm .49462			
#1	10.533	1.0205	.49031	.00063	.50051	1.0463	-.00223	.50783	.50522	.49424			
#2	10.561	1.0311	.49104	-.00038	.50253	1.0482	-.05354	.51079	.50227	.49501			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3078.2	Y_3600 Cts/S 52985.	Y_3774 Cts/S 6275.6										
#1	3073.3	53100.	6303.4										
#2	3083.0	52869.	6247.8										

Sample Name: CCB Acquired: 5/30/2015 13:58:02 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.00022	-.00304	.00160	.00002	-.00014	.00074	-.00114	-.00014	.00005	-.00006	-.00049	.00185
Stddev	.00008	.00003	.00552	.00016	.00013	.00006	.00069	.00046	.00002	.00013	.00044	.00009	.00034
%RSD	25.803	14.439	181.61	9.7241	627.64	40.181	93.645	40.503	15.409	267.14	781.82	17.531	18.526
#1	.00036	.00024	.00086	.00171	.00011	-.00018	.00025	-.00082	-.00016	-.00004	-.00037	-.00043	.00209
#2	.00025	.00019	-.00694	.00149	-.00007	-.00010	.00123	-.00147	-.00013	.00014	.00025	-.00055	.00161

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04008	.00063	.00198	-.00002	.00014	.00199	-.00034	-.00096	-.00042	-.00232	-.00130	-.00090	-.01626
Stddev	.02257	.00215	.00140	.00002	.00002	.00499	.00014	.00072	.00039	.00248	.00404	.00340	.00366
%RSD	56.327	340.92	70.588	111.75	10.691	250.41	40.575	74.688	93.622	107.12	310.47	376.52	22.533
#1	-.02411	-.00089	.00297	.00000	.00013	-.00154	-.00024	-.00147	-.00014	-.00056	-.00416	-.00331	-.01886
#2	-.05604	.00215	.00099	-.00003	.00015	.00552	-.00044	-.00045	-.00070	-.00407	.00156	.00150	-.01367

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	-.03481	.00068	.00006	.00292	-.00010	.00072	-.02356	-.00043	.00018	.00018			
Stddev	.00784	.00110	.00001	.00202	.00024	.00354	.00381	.00012	.00019	.00182			
%RSD	22.533	162.98	20.247	69.186	255.26	493.72	16.177	26.942	109.34	1038.9			
#1	-.04035	-.00010	.00007	.00149	-.00027	-.00178	-.02625	-.00035	.00031	.00146			
#2	-.02926	.00145	.00005	.00435	.00008	.00322	-.02086	-.00051	.00004	-.00111			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3106.0	53533.	6265.0										
Stddev	1.2	199.	25.4										
%RSD	.03860	.37205	.40612										
#1	3106.9	53392.	6247.1										
#2	3105.2	53674.	6283.0										

Sample Name: CCVL3301032 Acquired: 5/30/2015 14:00:25 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00962	.11153	.01846	.10756	.00984	.00083	.10857	.21674	.00525	.01110	.01110	.01541	.10437	3.0271
Stddev	.00037	.00027	.00062	.00062	.00003	.00001	.00097	.00326	.00055	.00001	.00021	.00001	.00017	.0026
%RSD	3.8056	.24408	3.3843	.57938	.35212	.69551	.89185	1.5039	10.401	.10872	1.8842	.05494	.16413	.08701
#1	.00988	.11134	.01802	.10800	.00982	.00083	.10925	.21443	.00564	.01109	.01095	.01541	.10425	3.0290
#2	.00936	.11173	.01890	.10712	.00987	.00084	.10788	.21904	.00487	.01111	.01125	.01540	.10449	3.0253

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.01020	.22013	.01094	.02100	1.0434	.04387	3.1663	.00865	.00416	.00792	.01659	.47898	1.0250	.10941
Stddev	.00073	.00123	.00013	.00033	.0200	.00009	.0159	.00207	.00264	.00259	.00198	.01984	.0425	.00004
%RSD	7.1833	.55920	1.1641	1.5852	1.9155	.19943	.50358	23.902	63.516	32.698	11.912	4.1422	4.1422	.04017
#1	.00969	.22100	.01103	.02124	1.0575	.04380	3.1551	.01011	.00229	.00609	.01799	.49301	1.0550	.10944
#2	.01072	.21926	.01085	.02077	1.0293	.04393	3.1776	.00719	.00602	.00975	.01519	.46495	.99500	.10938

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01046	.01764	.01074	.01866	.04390	.01061	.02335	.01454
Stddev	.00014	.00206	.00009	.00041	.02134	.00027	.00003	.00056
%RSD	1.3812	11.666	.82903	2.1913	48.613	2.5384	.14668	3.8337
#1	.01056	.01910	.01081	.01895	.02881	.01080	.02337	.01493
#2	.01035	.01619	.01068	.01837	.05898	.01042	.02333	.01414

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3101.4	53636.	6318.3
Stddev	4.0	250.	4.5
%RSD	.12980	.46643	.07145
#1	3104.2	53460.	6315.1
#2	3098.5	53813.	6321.5

Sample Name: 280-69774-A-2-F Acquired: 5/30/2015 14:03:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	.15366	-.00106	.00506	.00559	-.00005	-.00034	1.7923	-.00001
Stddev	.00040	.00068	.00337	.00073	.00004	.00006	.00104	.0022	.00000
%RSD	171.42	.44528	318.50	14.483	.73078	108.72	305.99	.12233	2.7395
#1	-.00052	.15318	.00133	.00558	.00556	-.00001	.00040	1.7907	-.00001
#2	.00005	.15415	-.00344	.00454	.00562	-.00009	-.00108	1.7938	-.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.00058	.00310	.22684	.13912	-.00138	.19687	.00400	.00107
Stddev	.00015	.00018	.00000	.00309	.00178	.00060	.00057	.00007	.00034
%RSD	46.985	31.766	.10025	1.3607	1.2820	43.382	.29116	1.6759	32.332
#1	.00042	.00071	.00309	.22465	.13786	-.00181	.19727	.00404	.00082
#2	.00021	.00045	.00310	.22902	.14039	-.00096	.19646	.00395	.00131
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.062	.00045	.01292	.00075	.81070	-.00394	.00081	1.1935	2.5541
Stddev	.073	.00035	.00222	.00068	.00522	.00186	.00078	.0181	.0388
%RSD	.52014	77.092	17.211	90.497	.64443	47.237	95.630	1.5178	1.5178
#1	14.010	.00070	.01450	.00124	.81439	-.00263	.00136	1.1807	2.5267
#2	14.113	.00021	.01135	.00027	.80700	-.00526	.00026	1.2063	2.5815
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	.01026	.00336	.00207	.00088	-.04445	.00089	.00358	-.00054
Stddev	.00161	.00029	.00107	.00034	.00255	.01970	.00002	.00042	.00157
%RSD	695.62	2.8381	31.701	16.382	291.82	44.321	2.1979	11.834	292.35
#1	.00091	.01006	.00412	.00183	.00268	-.05838	.00087	.00328	-.00164
#2	-.00137	.01047	.00261	.00231	-.00093	-.03052	.00090	.00388	.00057
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3151.2	54240.	6400.8						
Stddev	2.9	68.	8.0						
%RSD	.09302	.12516	.12505						
#1	3153.3	54192.	6406.4						
#2	3149.1	54288.	6395.1						

Sample Name: 280-69774-A-7-B Acquired: 5/30/2015 14:05:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 ppm	B_2089 ppm	Ba4554 .00813	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm
#1	-.00006	.11805	.00091	.00915	.00810	-.00020	-.00044	2.6639	-.00021
#2	-.00059	.11728	-.00192	.00818	.00816	-.00017	.00098	2.6556	-.00013
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 ppm	Fe2599 ppm	K_7664 766.490 {44}	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm
#1	.00030	.05523	.00051	.10918	.04012	-.00234	.59132	.00299	.00513
#2	.00046	.05665	.00144	.10897	.16843	-.00189	.59512	.00287	.00601
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Na8183 818.326 {41}	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
#1	8.9191	10.401	.00060	.02405	-.00087	4.3769	-.00010	.00121	1.7881
#2	8.9443	10.171	.00003	.02877	-.00172	4.5825	-.00517	.00536	1.7736
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 ppm	Ti3349 .00185	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm
#1	3.8265	.00009	.02265	.00361	.00154	-.00230	-.03759	.00144	.00256
#2	3.7956	.00140	.02254	.00312	.00215	-.00059	-.01116	.00112	.00386
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	-.00035								
#2	-.00060								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69774-A-7-B Acquired: 5/30/2015 14:05:46 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279236 SAR

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3151.0	54342.	6463.2
Stddev	5.6	49.	.8
%RSD	.17648	.09029	.01192
#1	3154.9	54377.	6463.7
#2	3147.1	54308.	6462.6

Sample Name: 280-69774-A-8-D Acquired: 5/30/2015 14:08:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279236 SAR

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00035	14.914	.00177	.01284	.42811	.00092	.00010	112.90	.00063
#2	.00003	14.802	.00269	.01267	.42609	.00091	.00214	112.31	.00057
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00959	.25352	.04157	14.638	5.3303	.00627	6.1533	.95267	.00498
#2	.01012	.25657	.04159	14.561	5.2652	.00955	6.2511	.95440	.00496
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	26.591	.02910	.43832	.02152	5.1559	-.00073	.00714	28.726	61.473
#2	26.398	.02972	.44812	.02097	5.3958	-.00158	.00808	28.503	60.997
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00215	.31903	.00476	.20394	-.00844	.01029	.04711	.06372	.00453
#2	.00332	.31794	.00570	.20765	-.00886	-.04593	.04828	.06559	.00391
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3104.1	52901.	6422.6						
#2	3106.8	52785.	6481.3						

Sample Name: 280-69779-C-2-B @5 Acquired: 5/30/2015 14:11:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/28 Custom ID2: Custom ID3:

Comment: 279222 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 .00109	B_2089 .02223	Ba4554 .08712	Be3130 1.3970	Bi2230 .00809	Ca3179 -.00260	Cd2288 228.802 {447}
#1	-.00185	118.87	.02323	.08567	1.3944	.00805	-.00235	200.66	.00105
#2	-.00034	120.33	.02123	.08857	1.3996	.00813	-.00285	202.95	.00128
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 .05446	Fe2714 .06487	K_7664 271.441 {124}	Li6707 766.490 {44}	Mg2790 670.784 {50}	Mn2576 279.079 {121}2	Mo2020 257.610 {131}
#1	.05421	.06488	.20500	117.50	13.317	.09328	34.515	2.4465	-.00178
#2	.05472	.06486	.20624	120.29	13.421	.09354	34.666	2.4513	-.00159
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 .07231	Pb2203 W 7.1989	S_1820 .08691	Sb2068 36.464	Se1960 W -.01259	Si2881 .00199	SiO2 288.158 {117}288.158 {117}2
#1	69.631	.07173	7.0991	.08579	36.409	-.01174	.00193	16.268	34.814
#2	70.034	.07289	7.2987	.08804	36.519	-.01344	.00205	16.311	34.905
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Warn 2.0000 -.01000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 1.2542	Ti3349 .06522	Tl1908 .17137	U_3701 -.00546	V_2924 F -.10277	Zn2062 .18297	Zr3391 .41864
#1	.00743	1.2523	.06393	.17058	-.00841	-.08581	.18289	.41795	.02496
#2	.00766	1.2560	.06650	.17217	-.00252	-.11973	.18305	.41934	.02299
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	360.073 {94}	377.433 {89}	3347.0	57091.	7151.5	Zr3391 .02398
#1	3352.9	57094.	7168.6			8.4	4.	24.2	.00016
#2	3341.0	57089.	7134.4			.25146	.00673	.33810	.00140

Sample Name: 280-69372-B-6-A Acquired: 5/30/2015 14:13:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/19 Custom ID2: Custom ID3:

Comment: 277951 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	.01276	-.00274	.02755	.03459	-.00015	.00220	48.530	.00018
Stddev	.00001	.00182	.00449	.00044	.00027	.00011	.00232	.074	.00009
%RSD	1.8497	14.278	163.88	1.5995	.77809	68.437	105.56	.15305	49.971
#1	-.00042	.01405	.00044	.02723	.03478	-.00008	.00384	48.583	.00012
#2	-.00043	.01148	-.00591	.02786	.03440	-.00023	.00056	48.478	.00025
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00050	.00002	3.9759	.46666	-.00186	21.566	2.4245	-.00030
Stddev	.00048	.00014	.00004	.0008	.00098	.00058	.003	.0024	.00016
%RSD	827.08	28.665	153.07	.02089	.21056	31.504	.01414	.10097	55.369
#1	.00040	.00061	.00000	3.9764	.46596	-.00144	21.564	2.4228	-.00041
#2	-.00028	.00040	.00005	3.9753	.46735	-.00227	21.568	2.4262	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.685	.00270	.58171	.00073	.80794	-.00246	.00249	18.420	39.418
Stddev	.118	.00025	.00514	.00003	.00795	.00450	.00119	.120	.256
%RSD	.32039	9.4357	.88406	3.7251	.98400	182.65	47.557	.65017	.65017
#1	36.602	.00252	.57808	.00075	.81356	-.00564	.00166	18.504	39.599
#2	36.768	.00288	.58535	.00071	.80232	-.00072	.00333	18.335	39.237
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	.20858	-.00053	.00062	-.00563	-.00291	-.00021	.00148	-.00055
Stddev	.00151	.00005	.00025	.00038	.00444	.00602	.00008	.00022	.00138
%RSD	259.69	.02355	47.204	61.381	78.837	206.52	38.548	14.755	252.20
#1	-.00049	.20855	-.00071	.00089	-.00877	.00134	-.00015	.00163	-.00152
#2	.00165	.20862	-.00035	.00035	-.00249	-.00717	-.00027	.00132	.00043
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3121.4	53570.	6402.8						
Stddev	5.3	288.	10.5						
%RSD	.17038	.53788	.16400						
#1	3125.1	53774.	6395.4						
#2	3117.6	53366.	6410.2						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 14:16:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00779	Al3092 ppm 49.702	As1890 ppm .00093	B_2089 ppm .00159	Ba4554 ppm .00050	Be3130 ppm -.00006	Bi2230 ppm 1.0432	Ca3179 ppm .03871	Cd2288 ppm -.00021	Co2286 ppm -.00015	Cr2055 ppm .00101
#1	-.00778	49.543	.00124	.00144	.00051	-.00013	1.0438	.03939	-.00040	-.00024	.00092
#2	-.00780	49.862	.00063	.00173	.00049	.00001	1.0425	.03803	-.00003	-.00007	.00111
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00004	Fe2714 ppm 50.451	K_7664 ppm -.04354	Li6707 ppm -.00113	Mg2790 ppm .04640	Mn2576 ppm -.00139	Mo2020 ppm -.00043	Na8183 ppm 246.69	Ni2316 ppm .00245	P_1782 ppm .00622	Pb2203 ppm .00022
#1	-.00029	50.374	-.03078	-.00168	.04248	-.00133	-.00051	246.39	.00237	.00506	.00054
#2	.00022	50.529	-.05630	-.00059	.05032	-.00145	-.00035	247.00	.00253	.00737	-.00011
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.1541	Sb2068 ppm -.01223	Se1960 ppm .00859	Si2881 ppm -.00102	SiO2 ppm -.00219	Sn1899 ppm -.00105	Sr4077 ppm .00034	Th2837 ppm 4.9698	Ti3349 ppm -.01282	TI1908 ppm -.00028	U_3701 ppm W 10.642
#1	5.2005	-.01470	.00950	-.00460	-.00984	-.00139	.00031	4.9707	-.01313	-.00123	10.546
#2	5.1076	-.00976	.00769	.00255	.00546	-.00072	.00038	4.9690	-.01250	.00067	10.737
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00237	Zn2062 ppm -.00022	Zr3391 ppm -.12231								
#1	.00253	.00006	-.12277								
#2	.00222	-.00049	-.12185								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3012.3	Y_3600 Cts/S 51417.	Y_3774 Cts/S 6236.9								
#1	3011.1	51424.	6258.3								
#2	3013.4	51410.	6215.6								

Sample Name: CCV-3296664 Acquired: 5/30/2015 14:18:58 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.50459	.54347	1.0277	.53021	.48910	.48634	.00043	4.9284	.51916	.51392	.51977	.51106	2.4879
Stddev	.00053	.00225	.0037	.00321	.00145	.00139	.00250	.0134	.00116	.00129	.00077	.00097	.0038
%RSD	.10475	.41474	.36473	.60513	.29573	.28542	576.08	.27109	.22391	.25070	.14811	.18925	.15291
#1	.50496	.54188	1.0251	.52794	.48808	.48536	.00220	4.9190	.51833	.51301	.52032	.51175	2.4852
#2	.50421	.54507	1.0304	.53248	.49012	.48732	-.00133	4.9379	.51998	.51483	.51923	.51038	2.4906

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.710	.97727	19.992	.50728	.50418	5.0423	.50893	1.0514	1.0151	.00413	1.0480	1.0308	4.8962
Stddev	.191	.00609	.054	.00143	.00106	.0101	.00125	.0008	.0059	.00145	.0036	.0023	.0445
%RSD	.39307	.62290	.26857	.28209	.21101	.20058	.24557	.07821	.57975	.35.075	.34381	.22113	.90937
#1	48.574	.97297	20.030	.50627	.50493	5.0495	.50804	1.0520	1.0110	.00516	1.0506	1.0324	4.9277
#2	48.845	.98158	19.954	.50830	.50343	5.0352	.50981	1.0508	1.0193	.00311	1.0455	1.0292	4.8647

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.478	1.0268	.48985	.00211	.50390	1.0455	-.04409	.51160	.49911	.48400
Stddev	.095	.0043	.00108	.00182	.00075	.0012	.04012	.00394	.00022	.00465
%RSD	.90937	.41940	.22005	86.486	.14838	.11706	91.003	.76963	.04359	.96041
#1	10.545	1.0237	.48909	.00082	.50443	1.0447	-.01572	.51439	.49896	.48729
#2	10.410	1.0298	.49061	.00339	.50337	1.0464	-.07246	.50882	.49927	.48071

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Chk Pass							
Avg	3047.2	52673.	6341.5								
Stddev	5.1	210.	.1								
%RSD	.16763	.39775	.00167								
#1	3050.8	52821.	6341.4								
#2	3043.6	52524.	6341.6								

Sample Name: CCB Acquired: 5/30/2015 14:21:26 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.00034	-0.00005	-0.00004	.00159	-.00024	-.00012	.00013	.00222	-.00020	-.00009	.00030	-.00068	.00101
Stddev	.00047	.00047	.00034	.00074	.00001	.00003	.00015	.00116	.00009	.00015	.00011	.00022	.00052
%RSD	137.72	882.00	928.49	46.296	5.4068	24.493	116.08	52.228	44.188	159.02	36.283	33.173	51.615
#1	-.00001	.00028	.00020	.00107	-.00023	-.00010	.00002	.00304	-.00014	.00001	.00022	-.00084	.00138
#2	-.00068	-.00039	-.00028	.00211	-.00025	-.00014	.00024	.00140	-.00027	-.00020	.00037	-.00052	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.04795	-.00113	-.00327	-.00003	.00021	.00369	-.00042	.00048	-.00026	-.00149	.00020	-.00034	-.00990
Stddev	.01137	.00020	.00105	.00004	.00028	.00411	.00029	.00430	.00017	.00239	.00050	.00025	.00033
%RSD	23.706	17.844	32.231	113.76	131.90	111.39	69.799	894.57	66.731	160.59	252.75	74.209	3.3072
#1	-.03991	-.00127	-.00252	-.00001	.00001	.00660	-.00062	.00352	-.00038	-.00317	.00055	-.00016	-.00967
#2	-.05599	-.00099	-.00401	-.00006	.00041	.00078	-.00021	-.00256	-.00014	.00020	-.00016	-.00052	-.01013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.02119	.00021	.00003	.00072	.00018	.00014	.00015	-.00230	-.00031	-.00006	.00010		
Stddev	.00070	.00051	.00006	.00090	.00008	.00115	.01987	.00049	.00029	.00046			
%RSD	3.3072	244.86	207.05	123.75	43.651	851.52	865.87	160.88	504.87	452.92			
#1	-.02070	.00056	.00007	.00009	.00012	.00095	.01176	-.00066	.00015	.00042			
#2	-.02169	-.00015	-.00001	.00136	.00023	-.00068	-.01635	.00004	-.00026	-.00022			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Units	3092.3	53367.	6284.7										
Avg	6.1	64.	21.3										
Stddev	.19608	.12062	.33964										
#1	3096.6	53412.	6299.8										
#2	3088.0	53321.	6269.6										

Sample Name: CCVL3301032 Acquired: 5/30/2015 14:23:48 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00970	.11001	F .01039	.10864	.00979	.00080	.10786	.20303	.00533	.01115	.01088	.01594
Stddev	.00046	.00041	.00362	.00027	.00016	.00004	.00093	.00010	.00003	.00015	.00004	.00047
%RSD	4.7488	.37077	34.836	.25060	1.6728	4.9111	.85911	.04860	.60294	1.3411	.37270	2.9340
#1	.01003	.11029	.01295	.10883	.00990	.00078	.10852	.20296	.00535	.01126	.01086	.01627
#2	.00938	.10972	.00783	.10845	.00967	.00083	.10720	.20310	.00531	.01105	.01091	.01560

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01500 -30.000%	Chk Pass								
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10185	2.9290	.00806	.21256	.01082	.02021	1.0314	.04216	3.1015	.00797	-.00045	.00968
Stddev	.00004	.0126	.00060	.00662	.00002	.00025	.0021	.00013	.0082	.00071	.00074	.00044
%RSD	.04104	.43160	7.4973	3.1155	.21567	1.2216	.20662	.30474	.26306	8.9091	165.62	4.4983
#1	.10182	2.9201	.00849	.21724	.01081	.02038	1.0299	.04207	3.0958	.00847	.00008	.00938
#2	.10188	2.9380	.00764	.20788	.01084	.02004	1.0329	.04225	3.1073	.00747	-.00097	.00999

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01574	.47689	1.0206	.10682	.01015	.01885	.01043	.01669	.06228	.01057	.02263	.01365
Stddev	.00449	.01582	.0339	.00090	.00001	.00032	.00034	.00020	.01543	.00013	.00041	.00008
%RSD	28.493	3.3175	3.3175	.84123	.05946	1.7017	3.2587	1.2047	24.772	1.2512	1.8115	.60082
#1	.01891	48808	1.0445	.10618	.01015	.01862	.01019	.01683	.05137	.01048	.02234	.01359
#2	.01257	.46571	.99661	.10745	.01014	.01908	.01067	.01655	.07319	.01067	.02292	.01371

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3096.1	53437.	6335.1									
Stddev	3.4	260.	3.0									
%RSD	.10887	.48597	.04695									
#1	3098.5	53254.	6333.0									
#2	3093.7	53621.	6337.2									

Sample Name: LB 280-278466/1-F Acquired: 5/30/2015 14:37:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/28 Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.00446	.00000	.00720	.00077	-.00025	-.00165	W .11814	-.00015
Stddev	.00062	.00042	.00250	.00128	.00005	.00004	.00041	.00020	.00004
%RSD	270.14	9.3216	95905.	17.804	6.7500	17.253	25.128	.17297	24.838
#1	-.00021	.00475	.00177	.00810	.00073	-.00028	-.00135	.11829	-.00013
#2	.00067	.00417	-.00176	.00629	.00080	-.00022	-.00194	.11800	-.00018
Check ?	Chk Pass	Chk Warn	Chk Pass						
High Limit								.10000	
Low Limit								-.10000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	-.00005	.00243	.03978	-.01678	.00009	.01083	.00112	.00003
Stddev	.00005	.00034	.00060	.00096	.01597	.00031	.00138	.00001	.00047
%RSD	7.8099	719.88	24.838	2.4196	95.184	355.95	12.748	.86844	1486.9
#1	-.00067	-.00029	.00285	.03910	-.02807	.00031	.01181	.00111	.00037
#2	-.00060	.00019	.00200	.04046	-.00548	-.00013	.00985	.00113	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	313.01	-.00007	.00274	F .02038	.01550	-.00057	.00270	-.00358	-.00766
Stddev	.86	.00042	.00206	.00062	.00250	.00129	.00031	.02597	.05557
%RSD	.27606	622.46	75.101	3.0299	16.095	224.71	11.339	725.29	725.29
#1	312.40	.00023	.00128	.02082	.01727	-.00148	.00292	-.02194	-.04696
#2	313.62	-.00036	.00419	.01995	.01374	.00034	.00249	.01478	.03163
Check ?	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit				.00900					
Low Limit				-.00300					
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	.00052	.00199	.00041	.00013	-.00762	-.00092	.00321	-.00042
Stddev	.00023	.00003	.00079	.00013	.00403	.02267	.00002	.00036	.00201
%RSD	19.998	6.3680	39.438	30.981	3052.8	297.50	2.1935	11.172	483.03
#1	.00134	.00050	.00144	.00050	.00298	-.02365	-.00093	.00296	.00100
#2	.00101	.00055	.00255	.00032	-.00272	.00841	-.00091	.00347	-.00184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2986.3	50812.	6193.8						
Stddev	.4	182.	7.7						
%RSD	.01300	.35802	.12501						
#1	2986.6	50940.	6188.3						
#2	2986.0	50683.	6199.3						

Sample Name: LCS 280-278466/2-F Acquired: 5/30/2015 14:40:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .21742	As1890 ppm .42018	B_2089 ppm .83606	Ba4554 ppm 2.4160	Be3130 ppm .00980	Bi2230 ppm .40625	Ca3179 ppm 10.034	Cd2288 ppm .23548
#1	.21846	.42047	.83633	.21429	2.4025	.00985	.40702	9.9803	.23528
#2	.21639	.41988	.83578	.21371	2.4295	.00975	.40547	10.088	.23567
Check ? High Limit Low Limit	Chk Pass	Chk Warn .43200 1.7200	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .10124	Cu3247 ppm F 1.0270	Fe2599 ppm .46507	K_7664 ppm 259.940 {130}	Li6707 ppm 766.490 {44}	Mg2790 ppm 670.784 {50}	Mn2576 ppm 279.079 {121}2	Mo2020 ppm 257.610 {131}
#1	.10108	1.0320	.46533	.21094	10.468	.20638	9.7231	.10260	.21128
#2	.10141	1.0220	.46480	.21572	10.655	.20837	9.7463	.10317	.21201
Check ? High Limit Low Limit	Chk Pass	Chk Fail .25200 .16800	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm F 324.68	P_1782 ppm .10031	Pb2203 ppm 2.1725	S_1820 ppm 1.1351	Sb2068 ppm .43493	Se1960 ppm 206.833 {463}	Si2881 ppm 196.090 {472}	SiO2 ppm 288.158 {117}288.158 {117}2
#1	323.09	.10030	2.1807	1.1340	.43698	.11158	.64857	1.9889	4.2563
#2	326.26	.10031	2.1644	1.1362	.43288	.10757	.63398	2.0274	4.3387
Check ? High Limit Low Limit	Chk Fail 11.200 9.1000	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .10800 .08800	Chk Pass	Chk Pass	Chk Fail 4.9220 4.0200
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .40735	Th2837 ppm .20024	Ti3349 ppm .20719	Tl1908 ppm .20841	U_3701 ppm .39315	V_2924 ppm .42743	Zn2062 ppm 370.152 {91}	Zr3391 ppm 292.402 {115}
#1	.40601	.19933	.20681	.20810	.39433	.41472	.10341	.51861	.09473
#2	.40868	.20115	.20756	.20871	.39196	.44013	.10399	.52532	.09562
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2955.0	Y_3774 Cts/S 50463.	377.433 {89}					
#1	2964.7	50675.	6218.3						
#2	2945.4	50252.	6139.9						

Sample Name: 280-69513-A-5-D Acquired: 5/30/2015 14:42:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00034	.00920	.00380	.00895	.39119	-.00019	.00209	141.48	-.00012
#2	-.00010	.00873	-.00456	.00879	.39236	-.00032	-.00101	142.23	.00003
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00070	.00024	.00279	.01899	.65738	.00264	4.2829	.14867	-.00211
#2	.00027	.00046	.00312	.01699	.70017	.00599	4.2304	.14921	-.00287
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	311.10	.00733	.01594	.05268	.92161	.00215	.00370	.80053	1.7131
#2	312.15	.00729	.02334	.05206	.92750	.00133	-.00312	.77498	1.6585
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00051	.27729	.00222	-.00062	-.00897	-.04876	.00023	.00356	.00129
#2	.00257	.27791	.00158	-.00027	-.00885	-.02615	.00001	.00502	-.00258
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2882.6	49805.	6149.6						
#2	2882.0	49813.	6073.9						

Sample Name: 280-69513-A-6-H Acquired: 5/30/2015 14:45:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.09926	.00178	.00913	.39438	-.00027	-.00122	103.38	.00036
Stddev	.00080	.00029	.00391	.00103	.00067	.00010	.00031	.21	.00003
%RSD	2190.8	.29552	219.51	11.313	.17095	38.486	25.148	.19913	7.5532
#1	.00053	.09947	.00454	.00986	.39390	-.00034	-.00100	103.23	.00038
#2	-.00060	.09906	-.00098	.00840	.39486	-.00019	-.00144	103.52	.00035
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.00071	.00341	.03225	.39456	.00168	2.8411	.00759	-.00263
Stddev	.00016	.00017	.00019	.00030	.05020	.00021	.0061	.00005	.00030
%RSD	30.385	23.360	5.6828	.94412	12.723	12.326	.21621	.67614	11.449
#1	-.00041	.00059	.00327	.03204	.35907	.00153	2.8454	.00755	-.00285
#2	-.00064	.00082	.00355	.03247	.43006	.00182	2.8367	.00763	-.00242
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	308.70	.00345	.03482	.01135	.16089	.00380	.00451	1.0547	2.2570
Stddev	.34	.00000	.00176	.00101	.00219	.00148	.00268	.0202	.0432
%RSD	.10996	.13070	5.0644	8.8980	1.3632	38.978	59.471	1.9151	1.9151
#1	308.46	.00345	.03607	.01063	.16244	.00484	.00261	1.0690	2.2876
#2	308.94	.00344	.03357	.01206	.15934	.00275	.00640	1.0404	2.2264
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00220	.17098	.00324	.00009	-.00759	-.04605	-.00028	.01418	-.00052
Stddev	.00007	.00052	.00068	.00004	.00200	.00222	.00029	.00018	.00050
%RSD	3.2576	.30235	21.050	45.382	26.278	4.8118	104.23	1.2703	95.922
#1	.00225	.17061	.00276	.00012	-.00901	-.04761	-.00007	.01405	-.00088
#2	.00215	.17134	.00372	.00006	-.00618	-.04448	-.00049	.01430	-.00017
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2896.0	49120.	5969.3						
Stddev	.3	361.	6.4						
%RSD	.01128	.73581	.10664						
#1	2896.2	48864.	5973.8						
#2	2895.8	49376.	5964.8						

Sample Name: 280-69513-A-6-H SD@5 Acquired: 5/30/2015 14:48:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00018	As1890 ppm .02160	B_2089 ppm .00065	Ba4554 ppm .00242	Be3130 ppm .08117	Bi2230 ppm .00032	Ca3179 ppm .00116	Cd2288 ppm .20938
#1	-.00072	.02163	-.00469	.00252	.08102	-.00028	.00039	20.899	.00029
#2	.00037	.02157	.00338	.00233	.08132	-.00036	.00192	20.978	-.00014
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00006	Cu3247 ppm .00008	Fe2599 ppm .00025	K_7664 ppm .01220	Li6707 ppm .08104	Mg2790 ppm .00158	Mn2576 ppm .00153	Mo2020 ppm .00074
#1	.00025	.00010	.00010	.01281	.12673	-.00168	.60591	.00156	-.00050
#2	-.00013	.00006	.00040	.01160	.03536	-.00147	.60780	.00149	-.00098
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 65.056	P_1782 ppm .00116	Pb2203 ppm .00839	S_1820 ppm .00263	Sb2068 ppm .03511	Se1960 ppm .00037	Si2881 ppm .00162	SiO2 ppm .43209
#1	64.214	.00126	.00821	.00113	.03677	-.00298	.00195	.19575	.41891
#2	65.898	.00105	.00856	.00412	.03346	.00223	-.00519	.20807	.44528
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00153	Th2837 ppm .03612	Ti3349 ppm .00198	Tl1908 ppm .00010	U_3701 ppm .00218	V_2924 ppm -.05189	Zn2062 ppm .00046	Zr3391 ppm .00222
#1	.00188	.03592	.00230	-.00020	-.00373	-.03682	-.00017	.00201	-.00127
#2	.00118	.03632	.00166	-.00001	-.00063	-.06697	-.00074	.00243	-.00029
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3007.4	Y_3774 Cts/S 51112.	377.433 {89}	5977.2	185.	29.8	206.200 {163}	339.198 {99}
#1	3000.9	51243.	5956.1						
#2	3013.9	50981.	5998.3						

Sample Name: 280-69513-A-6-I MS Acquired: 5/30/2015 14:51:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .20540	As1890 ppm .40426	B_2089 ppm .79870	Ba4554 ppm .20553	Be3130 ppm .26372	Bi2230 ppm .00918	Ca3179 ppm .38829	Cd2288 ppm .10663
#1	.20531	.40409	.80224	.20776	2.6369	.00918	.39119	106.62	.22855
#2	.20549	.40443	.79517	.20330	2.6376	.00919	.38539	106.64	.22422
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .09495	Cu3247 ppm W.94375	Fe2599 ppm .44015	K_7664 ppm .20181	Li6707 ppm .10453	Mg2790 ppm .20108	Mn2576 ppm .11764	Mo2020 ppm .10237
#1	.09606	.94499	.43768	.20339	10.435	.20130	11.745	.10182	.20007
#2	.09383	.94251	.44262	.20023	10.472	.20087	11.782	.10291	.19757
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 300.58	P_1782 ppm .09706	Pb2203 ppm W.21333	S_1820 ppm .10571	Sb2068 ppm .55178	Se1960 ppm .10865	Si2881 ppm .60841	SiO2 ppm 2.9605
#1	300.45	.09805	2.1523	1.0655	.55724	.11023	.61786	2.9628	6.3404
#2	300.70	.09608	2.1143	1.0488	.54632	.10707	.59895	2.9582	6.3305
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .38561	Th2837 ppm .34841	Ti3349 ppm .19479	Tl1908 ppm .19630	U_3701 ppm .36408	V_2924 ppm .39365	Zn2062 ppm .09887	Zr3391 ppm .49382
#1	.38786	.34886	.19366	.19508	.36535	.39254	.09810	.49095	.08838
#2	.38337	.34796	.19591	.19752	.36282	.39477	.09964	.49668	.08979
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2900.6	Y_3774 Cts/S 49627.	377.433 {89}					
#1	2909.3	49733.	6002.1						
#2	2891.9	49522.	5974.1						

Sample Name: 280-69513-A-6-J MSD Acquired: 5/30/2015 14:53:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .19150 .00055 .28530	As1890 ppm .38849 .00188 .48416	B_2089 ppm .74187 .01326 1.7877	Ba4554 ppm 2.4711 .0084 .34055	Be3130 ppm .00866 .00000 .01562	Bi2230 ppm .36718 .00016 .04324	Ca3179 ppm 99.743 .236 .23710	Cd2288 ppm .21131 .00045 .21523
#1	.19111	.38982	.75124	.19523	2.4651	.00866	.36707	99.576	.21099
#2	.19189	.38716	.73249	.19688	2.4770	.00866	.36730	99.910	.21164
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm .08826 .00028 .31623	Cu3247 ppm W .88998 .00158 .17734	Fe2599 ppm .41256 .00100 .24176	K_7664 ppm 9.6213 .1111 1.1546	Li6707 ppm .18378 .00222 1.2053	Mg2790 ppm 11.053 .035 .31639	Mn2576 ppm .09652 .00029 .30266	Mo2020 ppm .18559 .00012 .06640
#1	.08846	.89110	.41186	.19445	9.5427	.18222	11.078	.09672	.18550
#2	.08807	.88887	.41327	.19218	9.6998	.18535	11.029	.09631	.18568
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Na8183 818.326 {41}	Ni2316 ppm 282.11 .89 .31688	P_1782 ppm .09055 .00008 .08769	Pb2203 ppm 1.9943 .0020 .10095	S_1820 ppm .99238 .00364 .36683	Sb2068 ppm .52788 .01157 2.1914	Se1960 ppm .10111 .00012 .11491	Si2881 ppm 2.7429 .0422 .78259	SiO2 ppm 5.8699 .0903 1.5376
#1	281.47	.09060	1.9929	.99495	.53606	.10103	.57868	2.7131	5.8061
#2	282.74	.09049	1.9957	.98980	.51970	.10119	.57231	2.7728	5.9337
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .36035 .00089 .24702	Th2837 ppm .32701 .00169 .51543	Ti3349 ppm .18392 .00062 .33556	Tl1908 ppm .18522 .00079 .42605	U_3701 ppm .34244 .00166 .48591	V_2924 ppm .38817 .01767 4.5521	Zn2062 ppm .09312 .00030 .32137	Zr3391 ppm .46329 .00076 .16346
#1	.36098	.32582	.18436	.18577	.34361	.40066	.09291	.46383	.08395
#2	.35972	.32820	.18348	.18466	.34126	.37568	.09333	.46276	.08220
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2933.2	Y_3774 Cts/S 50075.	377.433 {89}					
#1	2925.8	49978.	6033.4						
#2	2940.6	50172.	6068.6						

Sample Name: 280-69513-A-6-H PDS Acquired: 5/30/2015 14:56:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05042	1.0661	.20511	.11071	.48305	.04983	.00221	119.49	.05300
Stddev	.00044	.0010	.00255	.00019	.00349	.00007	.00113	.43	.00026
%RSD	.86878	.09141	1.2445	.17257	.72249	.13148	50.819	.35957	.49212
#1	.05011	1.0655	.20692	.11085	.48552	.04978	.00301	119.79	.05318
#2	.05073	1.0668	.20331	.11058	.48059	.04987	.00142	119.18	.05281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04803	.04833	.05433	.99951	20.783	.10440	21.679	.05700	.04758
Stddev	.00034	.00060	.00001	.00994	.090	.00170	.039	.00016	.00081
%RSD	.70839	1.2456	.01067	.99427	.43315	1.6312	.18058	.27320	1.6970
#1	.04827	.04875	.05433	1.0065	20.847	.10319	21.707	.05711	.04815
#2	.04779	.04790	.05434	.99248	20.719	.10560	21.651	.05689	.04701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	320.93	.05167	W 2.1857	.10507	.15974	.10403	.20945	6.0121	12.866
Stddev	1.06	.00018	.0156	.00005	.00277	.00010	.00741	.0682	.146
%RSD	.33178	.34890	.71530	.05102	1.7313	.09899	3.5384	1.1348	1.1348
#1	321.68	.05154	2.1967	.10503	.15778	.10395	.21469	5.9639	12.763
#2	320.18	.05179	2.1746	.10511	.16169	.10410	.20421	6.0603	12.969
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10064	.21620	.20422	.05089	.18039	.48979	.05198	.22024	.04565
Stddev	.00001	.00112	.00340	.00068	.00256	.02169	.00117	.00074	.00050
%RSD	.01444	.51584	1.6661	1.3309	1.4212	4.4279	2.2524	.33582	1.0849
#1	.10065	.21699	.20181	.05137	.18220	.50512	.05280	.21971	.04600
#2	.10063	.21541	.20663	.05041	.17858	.47445	.05115	.22076	.04530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2888.1	49870.	6130.6						
Stddev	25.2	238.	1.5						
%RSD	.87213	.47797	.02493						
#1	2905.9	50039.	6131.6						
#2	2870.3	49702.	6129.5						

Sample Name: 280-69516-A-1-D Acquired: 5/30/2015 14:59:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00005	As1890 ppm .01025	B_2089 ppm .00125	Ba4554 ppm .01131	Be3130 ppm .16323	Bi2230 ppm -.00019	Ca3179 ppm .00218	Cd2288 ppm 1.2963
#1	-.00026	.01068	.00267	.01111	.16444	-.00018	-.00428	1.3057	.00318
#2	.00017	.00982	-.00017	.01150	.16201	-.00021	-.00008	1.2869	.00281
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00083	Cu3247 ppm W .69443	Fe2599 ppm .00496	K_7664 ppm .01378	Li6707 ppm .29655	Mg2790 ppm .00009	Mn2576 ppm .06788	Mo2020 ppm .00347
#1	.00092	.69390	.00491	.01333	.31880	-.00088	.07360	.00350	.00106
#2	.00073	.69496	.00501	.01424	.27430	.00105	.06216	.00344	.00120
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 327.83	P_1782 ppm -.00020	Pb2203 ppm 1.2222	S_1820 ppm .00147	Sb2068 ppm .32054	Se1960 ppm .00722	Si2881 ppm .00420	SiO2 ppm .05526
#1	329.09	.00017	1.2235	.00225	.32408	.00659	.00514	.05580	.11940
#2	326.57	-.00057	1.2209	.00068	.31700	.00785	.00325	.05473	.11712
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00966	Th2837 ppm 2.0740	Ti3349 ppm .00029	Tl1908 ppm .00031	U_3701 ppm .00047	V_2924 ppm -.02066	Zn2062 ppm -.00075	Zr3391 ppm 3.8189
#1	.00931	2.0820	-.00056	.00082	.00085	-.01221	-.00028	3.8771	.00226
#2	.01002	2.0661	.00115	-.00021	.00009	-.02911	-.00121	3.7607	-.00038
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2947.5	Y_3774 Cts/S 50079.	Th2837 Cts/S 6.7	Ti3349 Cts/S 238.	Tl1908 Cts/S 29.8	U_3701 Cts/S .48817	V_2924 Cts/S 57.864	Zn2062 Cts/S 88.189
#1	2952.2	49910.	6081.0	377.433 {89}	6102.1	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
#2	2942.7	50247.	6123.1						339.198 {99}

Sample Name: 280-69516-A-2-D Acquired: 5/30/2015 15:01:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00014	As1890 ppm .04108	B_2089 ppm .00028	Ba4554 ppm .01028	Be3130 ppm .15783	Bi2230 ppm .00021	Ca3179 ppm 5.0530	Cd2288 ppm .03922
#1	.00009	.04131	-.00174	.01003	.15809	-.00019	-.00232	5.0501	.03945
#2	-.00038	.04086	.00119	.01054	.15757	-.00023	-.00289	5.0559	.03899
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00011	Cu3247 ppm W .33841	Fe2599 ppm .00797	K_7664 ppm .06545	Li6707 ppm .52835	Mg2790 ppm .00239	Mn2576 ppm .17496	Mo2020 ppm .01386
#1	.00000	.33934	.00799	.06662	.49607	.00173	.17383	.01390	-.00006
#2	.00021	.33749	.00796	.06429	.56063	.00305	.17609	.01382	-.00032
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 321.43	P_1782 ppm .00061	Pb2203 ppm .75284	S_1820 ppm .00629	Sb2068 ppm .20206	Se1960 ppm .00127	Si2881 ppm .00763	SiO2 ppm .11604
#1	322.16	.00062	.74863	.00626	.20456	.00138	.00849	.11262	.24100
#2	320.70	.00059	.75706	.00632	.19956	.00116	.00677	.11946	.25564
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00317	Th2837 ppm .94028	Ti3349 ppm .00077	Tl1908 ppm .00007	U_3701 ppm .00036	V_2924 ppm -.01511	Zn2062 ppm -.00145	Zr3391 ppm 3.2168
#1	.00479	.94122	.00085	.00001	.00088	-.01106	-.00194	3.2110	-.00007
#2	.00155	.93935	.00069	.00012	-.00017	-.01917	-.00096	3.2227	.00078
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2972.1	Y_3774 Cts/S 50885.	360.073 {942}	377.433 {89}				
#1	2978.5	50510.	6232.6						
#2	2965.8	51259.	6205.7						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 15:04:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-00675	50.150	-00007	.00140	.00049	-00004	1.0418	.03475	-00044	-00035	.00064
Stddev	.00062	.165	.00218	.00021	.00038	.00020	.0005	.00516	.00013	.00038	.00004
%RSD	9.2218	.32957	3061.3	15.082	77.350	486.98	.05140	14.842	30.177	108.19	6.0828
#1	-.00719	50.266	-.00162	.00155	.00076	.00010	1.0414	.03840	-.00053	-.00062	.00061
#2	-.00631	50.033	.00147	.00125	.00022	-.00018	1.0422	.03110	-.00034	-.00008	.00067
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	50.583	.02162	-.00022	.03723	-.00130	-.00037	250.55	.00211	.00578	-.00038
Stddev	.00040	.616	.02282	.00064	.00030	.00006	.00002	.23	.00041	.00212	.00017
%RSD	170.41	1.2173	105.55	290.32	.79770	4.4359	5.6378	.09199	19.245	36.721	45.580
#1	-.00005	50.148	.03776	.00023	.03702	-.00134	-.00038	250.71	.00182	.00428	-.00050
#2	.00051	51.018	.00548	-.00067	.03744	-.00126	-.00035	250.39	.00239	.00728	-.00025
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1004	-.00748	.00790	-.03360	-.07191	-.00140	.00059	5.0067	-.01346	.00009	W 10.541
Stddev	.0355	.00274	.00191	.00127	.00271	.00029	.00006	.0147	.00030	.00039	.060
%RSD	.69588	36.576	24.173	3.7738	3.7738	20.487	10.684	.29335	2.2227	444.38	.56908
#1	5.0753	-.00554	.00655	-.03450	-.07383	-.00120	.00064	4.9963	-.01325	-.00019	10.498
#2	5.1255	-.00941	.00925	-.03271	-.06999	-.00160	.00055	5.0170	-.01367	.00036	10.583
Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value Range											10.000 5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00258	.00023	-.12636								
Stddev	.00008	.00074	.00178								
%RSD	3.1289	314.87	1.4083								
#1	.00263	.00075	-.12762								
#2	.00252	-.00029	-.12510								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2994.8	51158.	6093.7								
Stddev	8.2	200.	39.8								
%RSD	.27415	.39026	.65345								
#1	3000.6	51300.	6065.5								
#2	2989.0	51017.	6121.9								

Sample Name: CCV-3296664 Acquired: 5/30/2015 15:07:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .50495	Al1670 ppm .54545	As1890 ppm 1.0158	B_2089 ppm .52188	Ba4554 ppm .49565	Be3130 ppm .49369	Bi2230 ppm -.00111	Ca3179 ppm 5.0230	Cd2288 ppm .51791	Co2286 ppm .51449	Cr2055 ppm .51290	Cu3247 ppm .50733	Fe2599 ppm 2.5080
#1	.50589	.54485	1.0121	.51844	.49620	.49338	-.00126	5.0238	.51809	.51229	.50903	.50789	2.5107
#2	.50401	.54604	1.0196	.52531	.49510	.49400	-.00095	5.0221	.51773	.51669	.51678	.50676	2.5054
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm 49.554	Li6707 ppm .99852	Mg2790 ppm 20.100	Mn2576 ppm .50835	Mo2020 ppm .50212	Na5895 ppm 5.2049	Ni2316 ppm .50755	P_1782 ppm 1.0396	Pb2203 ppm 1.0145	S_1820 ppm .00191	Sb2068 ppm 1.0304	Se1960 ppm 1.0115	Si2881 ppm 4.9051
#1	49.614	.99899	20.087	.50695	.50016	5.2247	.50410	1.0313	1.0093	.00182	1.0279	1.0072	4.9448
#2	49.495	.99805	20.113	.50976	.50408	5.1851	.51100	1.0479	1.0196	.00200	1.0328	1.0159	4.8654
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 10.497	Sn1899 ppm 1.0193	Sr4077 ppm .49701	Th2837 ppm -.00175	Ti3349 ppm .50431	TI1908 ppm 1.0357	U_3701 ppm -.00853	V_2924 ppm .51181	Zn2062 ppm .50385	Zr3391 ppm .49216			
#1	10.582	1.0137	.49743	-.00293	.50289	1.0270	.02446	.51360	.50253	.49527			
#2	10.412	1.0249	.49659	-.00057	.50573	1.0444	-.04153	.51002	.50518	.48905			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3013.2	Y_3600 Cts/S 51985.	Y_3774 Cts/S 6126.2										
#1	3016.4	52162.	6108.3										
#2	3010.0	51808.	6144.0										

Sample Name: CCB Acquired: 5/30/2015 15:09:46 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.0008	.00035	-0.0151	.00223	-0.00030	-0.00021	-0.00041	.00057	.00009	.00020	-0.00037	-0.00035	-0.00177
Stddev	.00019	.00025	.00158	.00042	.00003	.00004	.00147	.00337	.00017	.00024	.00026	.00068	.00071
%RSD	238.74	71.550	104.90	18.985	8.7625	17.773	361.00	594.75	181.72	118.72	70.206	191.92	40.450
#1	.00006	.00053	-.00263	.00193	-.00028	-.00018	-.00145	.00295	-.00003	.00037	-.00019	.00013	-.00126
#2	-.00022	.00017	-.00039	.00253	-.00032	-.00023	.00063	-.00181	.00021	.00003	-.00056	-.00083	-.00227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.02198	-.00175	.00276	-.00001	-.00005	.09366	-.00034	.00033	-.00095	-.00230	.00025	.00447	-.01736
Stddev	.00603	.00168	.00326	.00003	.00002	.00257	.00011	.00089	.00018	.00089	.00300	.00136	.01084
%RSD	27.418	96.150	118.13	452.25	35.965	2.7461	33.005	266.04	18.983	38.655	1181.7	30.443	62.428
#1	-.02624	-.00294	.00045	.00002	-.00006	.09184	-.00043	-.00029	-.00108	-.00293	-.00187	.00543	-.00970
#2	-.01772	-.00056	.00507	-.00003	-.00004	.09548	-.00026	.00096	-.00082	-.00167	.00237	.00351	-.02503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.03716	.00080	.00004	.00346	.00044	.00084	-.03136	.00010	.00010	-.00036			
Stddev	.02320	.00115	.00004	.00131	.00028	.00247	.00604	.00010	.00005	.00017			
%RSD	62.428	142.96	99.661	37.848	63.954	293.53	19.264	100.04	51.047	46.604			
#1	-.02075	-.00001	.00001	.00253	.00063	.00259	-.03563	.00003	.00013	-.00024			
#2	-.05356	.00162	.00008	.00439	.00024	-.00090	-.02709	.00017	.00006	-.00048			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Units	3042.7	52281.	6030.0										
Avg	5.5	293.	49.3										
Stddev	.18193	.55968	.81695										
#1	3038.8	52074.	6064.9										
#2	3046.6	52487.	5995.2										

Sample Name: CCVL3301032II Acquired: 5/30/2015 15:12:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01038	.11030	.01550	.10723	.00988	.00088	.10845	.20559	.00542	.01075	.01076	.01576
Stddev	.00095	.00042	.00032	.00116	.00008	.00002	.00222	.00274	.00000	.00028	.00026	.00031
%RSD	9.1720	.37895	2.0945	1.0833	.78649	2.0148	2.0478	1.3326	.00871	2.5860	2.4344	1.9491
#1	.00971	.11000	.01527	.10640	.00993	.00086	.10688	.20752	.00542	.01094	.01095	.01555
#2	.01106	.11059	.01573	.10805	.00982	.00089	.11002	.20365	.00542	.01055	.01058	.01598

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10060	3.0275	.00951	.21621	.01092	.02027	1.0993	.04244	3.0731	.00867	-.00107	.00969
Stddev	.00022	.0229	.00010	.00022	.00011	.00033	.0199	.00030	.0187	.00135	.00341	.00170
%RSD	.21816	.75659	1.0937	.10127	.99147	1.6241	1.8145	.70454	.60950	15.540	318.31	17.578
#1	.10076	3.0437	.00958	.21606	.01099	.02004	1.1134	.04223	3.0598	.00962	.00134	.01090
#2	.10045	3.0113	.00944	.21637	.01084	.02050	1.0852	.04265	3.0863	.00772	-.00348	.00849

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01542	.46444	.99390	.10574	.01024	.01724	.01024	.01630	F .02999	.01004	.02290	.01365
Stddev	.00062	.01226	.02623	.00178	.00002	.00055	.00003	.00047	.01896	.00048	.00006	.00124
%RSD	4.0037	2.6395	2.6395	1.6865	.15448	3.1981	.29894	2.8579	63.239	4.7566	.27141	9.0850
#1	.01498	45577	.97535	.10448	.01025	.01763	.01026	.01597	.01658	.00970	.02286	.01453
#2	.01586	.47311	1.0124	.10700	.01023	.01685	.01022	.01663	.04340	.01038	.02295	.01278

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3054.8	52350.	6128.1
Stddev	10.1	127.	13.4
%RSD	.33013		.24323
#1	3047.6		52260.
#2	3061.9		52440.
	6137.5		6118.6

Sample Name: 280-69327-A-1-E Acquired: 5/30/2015 15:14:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.00778	.00004	.00871	.04747	-.00012	.00080	1.9929	.01213
Stddev	.00015	.00031	.00166	.00032	.00021	.00014	.00181	.0232	.00003
%RSD	79.390	3.9597	4322.2	3.6307	.44071	116.14	227.41	1.1637	.23949
#1	.00008	.00799	-.00114	.00893	.04762	-.00002	-.00049	1.9765	.01211
#2	.00029	.00756	.00121	.00849	.04732	-.00022	.00208	2.0093	.01215
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.00010	.00263	.01272	.02581	-.00063	.03796	.00088	-.00021
Stddev	.00030	.00008	.00089	.00260	.02621	.00046	.00124	.00004	.00002
%RSD	63.287	81.490	33.739	20.465	101.53	72.644	3.2598	4.4140	10.082
#1	-.00068	.00004	.00201	.01088	.00728	-.00096	.03883	.00091	-.00019
#2	-.00026	.00015	.00326	.01456	.04434	-.00031	.03708	.00085	-.00022
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	323.57	.00073	.11170	-.00134	.02870	-.00385	.00093	.00338	.00723
Stddev	2.02	.00012	.00129	.00213	.00274	.00045	.00077	.01105	.02364
%RSD	.62572	16.199	1.1564	158.43	9.5458	11.707	83.216	327.15	327.15
#1	322.14	.00065	.11079	.00016	.03063	-.00417	.00148	-.00443	-.00949
#2	325.00	.00082	.11261	-.00285	.02676	-.00353	.00038	.01119	.02394
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00247	.00242	.00225	.00002	-.00106	-.03993	-.00094	.15284	-.00095
Stddev	.00131	.00009	.00031	.00035	.00134	.00579	.00047	.00199	.00216
%RSD	52.965	3.5582	13.591	2199.3	125.87	14.494	50.551	1.2990	228.00
#1	.00339	.00236	.00203	.00026	-.00201	-.04402	-.00127	.15424	-.00248
#2	.00154	.00248	.00247	-.00023	-.00012	-.03584	-.00060	.15143	.00058
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2931.3	49896.	6054.6						
Stddev	1.4	279.	44.6						
%RSD	.04784	.55885	.73735						
#1	2930.3	49699.	6086.2						
#2	2932.3	50093.	6023.0						

Sample Name: 280-69327-B-3-E Acquired: 5/30/2015 15:17:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00001	.01131	-.00129	.04026	.08906	-.00027	-.00376	4.1044	-.00008
#2	.00009	.01135	-.00291	.04003	.08886	-.00023	-.00223	4.1347	.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00075	.00017	.00784	.03464	.15196	.00101	.09164	.00184	-.00047
#2	-.00036	.00034	.00871	.03470	.14712	-.00054	.08885	.00189	-.00058
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	316.37	.00090	.16380	-.00020	.02147	-.00230	-.00242	.01399	.02993
#2	316.28	.00106	.16325	-.00080	.02477	-.00195	.00295	.02933	.06278
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00174	.00622	.00002	.00054	-.00165	-.05072	-.00109	.45943	-.00035
#2	.00184	.00611	-.00131	.00054	-.00056	.00859	-.00194	.45725	-.00370
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2964.5	50548.	6213.0						
#2	2961.7	50521.	6157.3						

Sample Name: 280-69327-A-5-E Acquired: 5/30/2015 15:20:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.01167	.00206	.04592	.04421	-.00011	-.00093	2.4701	.01847
Stddev	.00046	.00065	.00060	.00120	.00018	.00009	.00020	.0401	.00008
%RSD	142.55	5.5704	29.326	2.6161	.41306	76.055	21.655	1.6246	.42346
#1	.00000	.01213	.00248	.04507	.04408	-.00005	-.00108	2.4417	.01852
#2	.00065	.01121	.00163	.04677	.04434	-.00018	-.00079	2.4984	.01841
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	.00049	.00891	.00991	.13397	.00053	.14828	.00229	-.00005
Stddev	.00014	.00003	.00039	.00012	.00283	.00075	.00110	.00003	.00041
%RSD	32.089	6.2664	4.4142	1.2398	2.1101	142.06	.74151	1.2704	766.56
#1	-.00033	.00051	.00919	.00982	.13197	.00105	.14906	.00227	.00023
#2	-.00052	.00047	.00863	.00999	.13597	.00000	.14751	.00231	-.00034
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	333.75	.00126	.16716	-.00028	.04717	-.00158	.00326	-.00413	-.00884
Stddev	1.83	.00033	.00189	.00084	.00397	.00221	.00348	.00324	.00692
%RSD	.54812	25.951	1.1315	296.35	8.4239	139.83	106.77	78.349	78.349
#1	332.46	.00149	.16850	-.00087	.04436	-.00002	.00080	-.00184	-.00394
#2	335.05	.00103	.16583	.00031	.04998	-.00315	.00571	-.00642	-.01373
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00077	.00432	.00352	.00019	.00035	-.03491	-.00133	.14699	-.00064
Stddev	.00103	.00012	.00025	.00002	.00168	.01904	.00012	.00181	.00019
%RSD	134.49	2.8763	6.9757	8.4576	480.26	54.537	8.9323	1.2298	30.235
#1	.00150	.00423	.00369	.00018	-.00084	-.02144	-.00141	.14827	-.00050
#2	.00004	.00441	.00334	.00020	.00154	-.04837	-.00124	.14571	-.00077
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2921.6	50353.	6188.6						
Stddev	13.5	232.	52.7						
%RSD	.46184	.45994	.85228						
#1	2912.0	50517.	6225.9						
#2	2931.1	50189.	6151.3						

Sample Name: 280-69327-A-7-E Acquired: 5/30/2015 15:23:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.00816	-.00121	.07502	.06915	-.00017	-.00195	5.6003	.04506
Stddev	.00008	.00020	.00013	.00043	.00026	.00005	.00009	.0263	.00044
%RSD	13.216	2.4308	10.650	.56757	.38098	27.499	4.7160	.47026	.97486
#1	-.00063	.00802	-.00130	.07472	.06897	-.00020	-.00202	5.5817	.04475
#2	-.00052	.00830	-.00112	.07532	.06934	-.00014	-.00189	5.6189	.04537
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	.00056	.12053	.00657	.17155	-.00076	.13747	.00567	-.00037
Stddev	.00007	.00025	.00043	.00017	.03551	.00119	.00354	.00012	.00067
%RSD	13.251	45.143	.35481	2.5886	20.697	156.17	2.5742	2.0888	181.84
#1	-.00059	.00074	.12083	.00645	.14645	-.00160	.13497	.00558	.00011
#2	-.00049	.00038	.12023	.00669	.19666	.00008	.13998	.00575	-.00084
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	337.09	.00512	.18727	.00046	.04903	.00427	.00187	.00499	.01067
Stddev	1.79	.00008	.00334	.00010	.00789	.00149	.00287	.01020	.02183
%RSD	.53071	1.5476	1.7853	21.603	16.084	34.812	153.48	204.55	204.55
#1	335.83	.00517	.18491	.00039	.04345	.00532	.00391	.01220	.02611
#2	338.36	.00506	.18964	.00054	.05460	.00322	-.00016	-.00223	-.00476
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.00576	.00167	-.00001	-.00262	-.02169	-.00134	.28700	-.00070
Stddev	.00130	.00010	.00372	.00027	.00074	.00861	.00033	.00026	.00050
%RSD	206.80	1.6856	222.39	4676.5	28.193	39.714	24.410	.09109	71.456
#1	-.00029	.00569	-.00096	-.00020	-.00210	-.01560	-.00111	.28682	-.00105
#2	.00155	.00583	.00430	.00019	-.00315	-.02778	-.00158	.28719	-.00034
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2985.4	50828.	6241.4						
Stddev	12.3	196.	27.6						
%RSD	.41238	.38596	.44170						
#1	2976.7	50690.	6221.9						
#2	2994.1	50967.	6260.9						

Sample Name: 280-69327-A-9-E Acquired: 5/30/2015 15:25:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00125	.01802	.00070	.03555	.09524	-.00019	-.00130	4.1211	.00041
#2	-.00017	.01820	-.00251	.03552	.09462	-.00023	-.00045	4.1694	.00015
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00055	.00022	.00441	.13496	.15121	.00156	.11118	.00210	-.00064
#2	-.00049	.00032	.00390	.13612	.15127	.00013	.10878	.00221	-.00046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	321.37	.00268	.16248	.00169	.07192	-.00202	.00588	-.00067	-.00143
#2	319.28	.00224	.16199	-.00046	.07251	-.00321	.00001	.01610	.03445
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00149	.00367	.00140	.00012	-.00258	-.00183	-.00133	.23558	-.00088
#2	.00007	.00386	-.00115	.00008	.00085	-.04502	-.00176	.23432	.00047
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2964.7	50860.	6254.8						
#2	2956.0	51217.	6240.3						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 15:28:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00740	Al3092 ppm 49.520	As1890 ppm -.00487	B_2089 ppm .00125	Ba4554 ppm .00053	Be3130 ppm -.00001	Bi2230 ppm 1.0423	Ca3179 ppm .03110	Cd2288 ppm -.00011	Co2286 ppm -.00041	Cr2055 ppm .00075
#1	-.00707	49.218	-.00446	.00077	.00045	-.00005	1.0387	.03156	-.00006	-.00009	.00084
#2	-.00773	49.822	-.00528	.00172	.00062	.00004	1.0458	.03064	-.00015	-.00073	.00066
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00001	Fe2714 ppm 49.079	K_7664 ppm .02482	Li6707 ppm -.00076	Mg2790 ppm .04181	Mn2576 ppm -.00157	Mo2020 ppm -.00031	Na8183 ppm 246.48	Ni2316 ppm .00195	P_1782 ppm .00847	Pb2203 ppm -.00184
#1	.00029	49.323	.04694	-.00090	.04340	-.00153	.00002	246.13	.00173	.00791	-.00241
#2	-.00027	48.835	.00269	-.00061	.04022	-.00161	-.00065	246.84	.00217	.00903	-.00126
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0901	Sb2068 ppm -.00951	Se1960 ppm .01093	Si2881 ppm -.03805	SiO2 ppm -.08143	Sn1899 ppm -.00071	Sr4077 ppm .00040	Th2837 ppm 5.0115	Ti3349 ppm -.01318	TI1908 ppm .00138	U_3701 ppm W 10.600
#1	5.0774	-.01081	0.1028	-.03545	-.07586	-.00125	.00047	5.0180	-.01289	.00231	10.649
#2	5.1028	-.00820	.01159	-.04065	-.08700	-.00018	.00032	5.0051	-.01346	.00046	10.551
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00253	Zn2062 ppm -.00040	Zr3391 ppm -.13035								
#1	.00255	-.00023	-.12889								
#2	.00251	-.00056	-.13180								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3012.6	Y_3600 Cts/S 51066.	Y_3774 Cts/S 6094.9								
#1	3015.3	50979.	6074.7								
#2	3009.9	51152.	6115.1								

Sample Name: CCV-3296664 Acquired: 5/30/2015 15:31:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.50128	.54428	1.0130	.52262	.49294	.48939	-.00106	4.9634	.51459	.51491	.51572	.50712	2.4794
Stddev	.00096	.00110	.0069	.00106	.00301	.00151	.00302	.0330	.00101	.00511	.00378	.00194	.0094
%RSD	.19162	.20129	.68457	.20311	.61095	.30865	283.20	.66393	.19711	.99247	.73379	.38228	.38009
#1	.50196	.54505	1.0179	.52337	.49507	.49046	.00107	4.9867	.51531	.51852	.51839	.50849	2.4860
#2	.50061	.54350	1.0081	.52187	.49081	.48832	-.00320	4.9401	.51387	.51130	.51304	.50575	2.4727
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.263	.98902	20.029	.51035	.50250	5.1842	.50751	1.0473	1.0120	.00561	1.0292	1.0214	4.8793
Stddev	.114	.00208	.036	.00017	.00604	.0368	.00548	.0085	.0098	.00567	.0089	.0104	.0269
%RSD	.23153	.21071	.18175	.03428	1.2013	.71008	1.0794	.81095	.96617	101.24	.86878	1.0134	.55175
#1	49.344	.99049	20.055	.51023	.50677	5.2102	.51139	1.0533	1.0189	.00962	1.0355	1.0287	4.8984
#2	49.183	.98755	20.004	.51048	.49823	5.1581	.50364	1.0413	1.0051	.00159	1.0229	1.0141	4.8603
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.442	1.0180	.49467	.00090	.50504	1.0374	-.05315	.51791	.50001	.48817			
Stddev	.058	.0129	.00290	.00062	.00009	.0117	.00136	.00185	.00165	.00553			
%RSD	.55175	1.2639	.58720	69.301	.01822	1.1240	2.5498	.35635	.33015	1.1325			
#1	10.483	1.0271	.49672	.00046	.50498	1.0456	-.05411	.51922	.50117	.49208			
#2	10.401	1.0089	.49261	.00134	.50511	1.0291	-.05220	.51661	.49884	.48426			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3028.0	51997.	6193.3										
Stddev	1.3	42.	9.9										
%RSD	.04180	.08059	.16046										
#1	3027.1	52026.	6186.3										
#2	3028.9	51967.	6200.3										

Sample Name: CCB Acquired: 5/30/2015 15:33:53 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00006	.00017	-.00075	.00041	-.00013	-.00015	-.00048	.00046	-.00037	-.00011	-.00028	-.00011	-.00168
Stddev	.00031	.00035	.00002	.00054	.00007	.00000	.00056	.00027	.00006	.00028	.00002	.00058	.00120
%RSD	533.99	203.24	2.1947	130.81	50.577	3.1608	116.61	58.920	15.968	264.17	7.7054	545.13	71.219
#1	.00028	-.00007	-.00074	.00079	-.00018	-.00015	-.00008	.00027	-.00042	-.00030	-.00030	.00030	-.00252
#2	-.00016	.00041	-.00076	.00003	-.00009	-.00014	-.00087	.00066	-.00033	.00009	-.00027	-.00052	-.00083

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.05937	-.00188	.00129	-.00002	.00043	.09040	-.00008	.00067	-.00134	.00310	-.00231	.00176	-.02315
Stddev	.05230	.00026	.00063	.00009	.00002	.00314	.00012	.00055	.00154	.00019	.00008	.00361	.00376
%RSD	88.096	13.892	48.662	498.40	5.0844	3.4706	153.62	82.499	114.80	6.2675	3.3248	205.91	16.255
#1	-.02239	-.00206	.00174	.00004	.00045	.08818	-.00017	.00028	-.00243	.00323	-.00236	.00431	-.02049
#2	-.09635	-.00169	.00085	-.00008	.00041	.09262	.00001	.00106	-.00025	.00296	-.00226	-.00080	-.02581

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.04954	.00021	.00014	.00174	-.00023	-.00167	-.01055	-.00053	.00030	-.00010			
Stddev	.00805	.00094	.00001	.00103	.00046	.00310	.02966	.00040	.00085	.00159			
%RSD	16.255	457.80	4.9727	59.393	202.33	185.20	281.29	75.753	283.78	1643.7			
#1	-.04384	-.00046	.00013	.00101	.00010	-.00387	-.03152	-.00081	.00090	.00103			
#2	-.05523	.00087	.00014	.00247	-.00056	.00052	.01043	-.00025	-.00030	-.00122			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Units	3068.6	52925.	6164.7										
Avg	19.0	27.	83.0										
Stddev	.61763	.05060	1.3472										
#1	3055.2	52944.	6106.0										
#2	3082.0	52906.	6223.4										

Sample Name: CCVL3301032 Acquired: 5/30/2015 15:36:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00952	.10887	.01671	.10710	.01010	.00085	.10653	.20787	.00515	.01071	.01059	.01537
Stddev	.00068	.00095	.00200	.00095	.00003	.00007	.00331	.00579	.00005	.00010	.00012	.00051
%RSD	7.1318	.86987	11.943	.88902	.26872	8.1307	3.1094	2.7852	.92846	.89195	1.1401	3.3286
#1	.01000	.10954	.01530	.10642	.01012	.00090	.10419	.21196	.00518	.01064	.01050	.01574
#2	.00904	.10820	.01812	.10777	.01008	.00080	.10887	.20378	.00511	.01078	.01067	.01501

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10163	3.0476	F .00641	.21025	.01073	.02021	1.1232	.04114	3.0609	.00904	.00077	.00782
Stddev	.00146	.0262	.00063	.00063	.00000	.00017	.0128	.00005	.0046	.00212	.00291	.00020
%RSD	1.4410	.86115	9.8017	.29919	.03633	.84938	1.1373	.13313	.14939	23.515	377.33	2.5277
#1	.10060	3.0662	.00597	.21069	.01074	.02033	1.1322	.04117	3.0577	.01054	-.00129	.00796
#2	.10267	3.0291	.00686	.20980	.01073	.02008	1.1142	.04110	3.0642	.00753	.00283	.00768

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .10000	Chk Pass	None	Chk Pass						
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01568	.47103	1.0080	.10371	.01039	.01847	.01017	.01473	F .03466	.00934	.02188	.01431
Stddev	.00027	.02479	.0531	.00053	.00013	.00362	.00051	.00250	.01796	.00023	.00052	.00071
%RSD	1.7200	5.2633	5.2633	.51433	1.2804	19.580	4.9798	16.960	51.817	2.4326	2.3631	4.9940
#1	.01587	45350	.97048	.10408	.01030	.01591	.00981	.01649	.02196	.00918	.02224	.01482
#2	.01549	.48856	1.0455	.10333	.01049	.02102	.01053	.01296	.04736	.00950	.02151	.01381

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3077.0	52921.	6218.7									
Stddev	25.3	134.	14.9									
%RSD	.82085	.25228	.23906									
#1	3059.1	52827.	6229.2									
#2	3094.8	53015.	6208.2									

Sample Name: MB 280-279410/1-A Acquired: 5/30/2015 15:38:56 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.01757	-.00163	.00100	.00043	-.00014	-.00238	W .12063	-.00017
Stddev	.00026	.00031	.00502	.00045	.00012	.00001	.00013	.00089	.00009
%RSD	86.993	1.7640	308.11	45.440	27.583	8.7600	5.2899	.73966	50.843
#1	-.00012	.01735	-.00518	.00132	.00051	-.00013	-.00247	.12126	-.00011
#2	-.00049	.01779	.00192	.00068	.00035	-.00015	-.00229	.12000	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	-.00002	F .03363	.01779	-.04513	-.00321	.00954	.00022	.00012
Stddev	.00016	.00017	.00008	.00149	.01228	.00134	.00069	.00001	.00019
%RSD	908.46	1002.7	.22692	8.4022	27.219	41.666	7.2317	5.7035	150.13
#1	-.00009	.00010	.03368	.01673	-.05382	-.00226	.01002	.00023	-.00001
#2	.00013	-.00013	.03358	.01885	-.03645	-.00415	.00905	.00021	.00025
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01500						
Low Limit			-.01500						
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04517	-.00077	.00212	.00016	.00361	-.00352	.00139	.00510	.01092
Stddev	.00314	.00010	.00007	.00256	.00761	.00138	.00105	.02553	.05463
%RSD	6.9456	13.353	3.3803	1640.8	210.88	39.149	75.753	500.45	500.45
#1	.04295	-.00084	.00217	-.00165	.00899	-.00255	.00213	-.01295	-.02771
#2	.04739	-.00069	.00207	.00196	-.00177	-.00450	.00065	.02315	.04954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.00028	.00347	.00023	-.00073	-.03483	-.00012	.00145	-.00071
Stddev	.00099	.00003	.00147	.00010	.00101	.01345	.00026	.00004	.00040
%RSD	191.22	10.873	42.292	44.766	138.43	38.609	226.08	2.9659	55.968
#1	.00121	.00030	.00450	.00016	-.00144	-.04434	-.00030	.00142	-.00100
#2	-.00018	.00026	.00243	.00030	-.00002	-.02532	.00007	.00148	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3054.2	52953.	6258.1						
Stddev	1.8	155.	29.5						
%RSD	.05910	.29232	.47090						
#1	3052.9	52844.	6279.0						
#2	3055.5	53063.	6237.3						

Sample Name: LCS 280-279410/2-A Acquired: 5/30/2015 15:41:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04629	2.0775	1.0157	1.0735	1.9746	.04915	2.0366	48.395	.10433
#2	.04602	2.0895	1.0293	1.0757	1.9800	.04854	2.0452	48.485	.10502
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49943	.19963	.28891	.99261	49.610	.99015	49.830	.51044	1.0467
#2	.50207	.20032	.28630	.98178	49.660	.98947	49.693	.51094	1.0502
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .28000 .04275 .21500	Chk Fail .28000 .21500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	53.524	.49438	10.757	.50607	2.0770	.54507	2.1319	9.8824	21.148
#2	52.724	.49571	10.817	.50506	2.0860	.54125	2.1080	9.8665	21.114
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn .54000 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0706	.98988	1.0212	1.0225	2.0718	2.1345	.52110	.49946	.46820
#2	2.0617	.99160	1.0204	1.0236	2.0701	2.1489	.52293	.49867	.46750
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2961.6	51097.	6214.3						
#2	2948.0	50922.	6212.2						

Sample Name: 280-69735-A-16-E Acquired: 5/30/2015 15:43:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00007	As1890 ppm .06063	B_2089 ppm .00186	Ba4554 ppm .00948	Be3130 ppm .03660	Bi2230 ppm .00002	Ca3179 ppm .70924	Cd2288 ppm .00011
#1	-.00027	.06057	-.00484	.00983	.03647	-.00001	-.00221	.70467	.00021
#2	.00013	.06070	.00112	.00914	.03672	-.00002	-.00182	.71381	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00011	Cu3247 ppm .00102	Fe2599 ppm .00015	K_7664 ppm .15754	Li6707 ppm .56897	Mg2790 ppm .00985	Mn2576 ppm .53617	Mo2020 ppm .01756
#1	.00033	.00110	-.00010	.15509	.53951	.00928	.52918	.01742	.00058
#2	-.00010	.00094	-.00020	.16000	.59842	.01041	.54316	.01771	.00047
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 24.798	P_1782 ppm .00331	Pb2203 ppm .00634	S_1820 ppm -.00166	Sb2068 ppm 7.9252	Se1960 ppm -.00111	Si2881 ppm .00071	SiO2 ppm 16.074
#1	24.141	.00322	.00545	-.00138	8.0297	-.00035	.00238	15.627	33.442
#2	25.454	.00340	.00723	-.00193	7.8206	-.00187	-.00097	16.521	35.356
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00073	Th2837 ppm .00440	Ti3349 ppm .00301	Tl1908 ppm .00108	U_3701 ppm -.00213	V_2924 ppm -.02400	Zn2062 ppm -.00078	Zr3391 ppm .00725
#1	.00100	.00439	.00369	.00110	-.00186	-.02712	-.00036	.00726	.00034
#2	.00047	.00441	.00233	.00106	-.00241	-.02087	-.00120	.00724	-.00156
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3048.2	Y_3774 Cts/S 52614.	377.433 {89}					
#1	3041.5	52541.	6345.6						
#2	3054.9	52687.	6318.2						

Sample Name: 280-69735-A-16-ESD@5 Acquired: 5/30/2015 15:46:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00023	.01365	.00198	.00316	.00735	-.00017	-.00085	.14573	-.00033
#2	.00025	.01399	.00168	.00288	.00737	-.00008	.00183	.14948	-.00034
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00013	.00023	-.00040	.03275	.05366	-.00034	.10828	.00359	-.00017
#2	.00018	.00014	-.00080	.03399	.07373	.00209	.10857	.00362	.00029
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	4.4900	.00021	.00383	.00111	1.5910	-.00278	.00187	3.1502	6.7414
#2	4.4996	-.00008	.00384	-.00096	1.6395	-.00416	-.00630	3.1642	6.7715
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00097	.00089	.00117	.00022	-.00061	-.01453	-.00005	.00198	.00123
#2	-.00148	.00092	.00219	.00039	-.00055	-.02208	-.00019	.00163	-.00168
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3078.8	53433.	6319.4						
#2	3064.4	52611.	6316.0						

Sample Name: 280-69735-A-16-F MS Acquired: 5/30/2015 15:49:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04507	2.0622	1.0134	1.0635	1.9588	.04765	2.0205	47.716	.10418
#2	.04502	2.0494	1.0096	1.0622	1.9732	.04802	2.0150	48.114	.10399
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49231	.19757	.25334	1.0746	48.753	.97208	49.434	.51669	1.0271
#2	.49256	.19878	.25254	1.0867	49.242	.98272	49.455	.51771	1.0256
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	74.115	.48845	10.621	.49840	9.9026	.52979	2.0745	25.015	53.532
#2	75.015	.48819	10.600	.49246	9.9014	.52913	2.1019	25.273	54.085
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0201	.96710	1.0063	1.0063	2.0130	2.0664	.51106	.48655	.44642
#2	2.0463	.97454	1.0116	1.0098	2.0486	2.0675	.51351	.49065	.45415
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2960.7	51323.	6267.8						
#2	2974.8	51084.	6236.0						

Sample Name: 280-69735-A-16-G MSD Acquired: 5/30/2015 15:51:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04434	2.0424	.99935	1.0556	1.9538	.04804	F 1.9955	47.631	.10265
Stddev	.00052	.0032	.00548	.0001	.0083	.00009	.0007	.155	.00026
%RSD	1.1644	.15675	.54835	.00727	.42561	.17718	.03713	.32452	.25434
#1	.04398	2.0447	1.0032	1.0557	1.9597	.04810	1.9950	47.740	.10283
#2	.04471	2.0402	.99548	1.0556	1.9479	.04798	1.9960	47.522	.10246
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48456	W .19573	.24941	1.0887	48.723	.97169	48.813	.51097	1.0156
Stddev	.00122	.00018	.00078	.0129	.207	.00321	.057	.00166	.0008
%RSD	.25227	.09014	.31303	1.1818	.42412	.33034	.11622	.32520	.07470
#1	.48542	.19586	.24996	1.0978	48.869	.97396	48.853	.50980	1.0162
#2	.48369	.19561	.24885	1.0796	48.576	.96942	48.773	.51215	1.0151
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.643	.48153	W 10.476	.48543	9.8425	.52492	2.0510	25.395	54.344
Stddev	.681	.00054	.030	.00079	.0343	.00307	.0060	.088	.188
%RSD	.91181	.11254	.28638	.16376	.34852	.58478	.29357	.34630	.34630
#1	75.125	.48191	10.497	.48599	9.8667	.52709	2.0552	25.457	54.477
#2	74.162	.48114	10.455	.48487	9.8182	.52275	2.0467	25.332	54.211
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-1.0000							
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9880	.96512	.99397	.99764	1.9838	2.0509	.50412	.48377	.45509
Stddev	.0018	.00343	.00093	.00209	.0004	.0192	.00087	.00164	.00102
%RSD	.08812	.35522	.09346	.20959	.01989	.93583	.17297	.33888	.22356
#1	1.9893	.96754	.99463	.99616	1.9841	2.0373	.50351	.48493	.45437
#2	1.9868	.96269	.99332	.99911	1.9835	2.0645	.50474	.48261	.45581
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2966.1	51334.	6213.1						
Stddev	2.7	163.	42.6						
%RSD	.09160	.31845	.68541						
#1	2964.2	51450.	6183.0						
#2	2968.0	51219.	6243.2						

Sample Name: 280-69735-A-16-E PDS Acquired: 5/30/2015 15:53:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04531	1.0438	.18954	.11087	.13206	.04754	.00015	19.135	.05083
#2	.04679	1.0380	.19444	.11080	.12885	.04677	-.00005	18.866	.05063
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.04819	.04948	.04852	1.0831	19.245	.10736	19.184	.06457	.04793
#2	.04884	.05000	.04782	1.0645	19.028	.10561	19.303	.06491	.04868
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	44.167	.05184	2.0025	.09584	7.9258	.09866	.20390	20.823	44.561
#2	44.123	.05211	1.9979	.09596	7.9169	.09828	.18920	20.498	43.866
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.09888	.05325	.19565	.05021	.19801	.43516	.04905	.20178	.04236
#2	.10090	.05280	.19572	.05013	.19858	.45006	.04949	.20265	.04041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3028.2	52093.	6233.3						
#2	3026.7	52328.	6317.3						

Sample Name: 280-69735-A-29-E Acquired: 5/30/2015 15:56:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00000	.00409	.00375	.05270	.03124	-.00005	-.00138	30.745	-.00006
#2	.00026	.00469	-.00831	.05265	.03145	-.00016	-.00290	30.936	.00026
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00007	.00015	.00022	1.0996	1.8417	.01955	13.590	.12682	-.00014
#2	-.00004	.00038	-.00021	1.1027	1.8867	.01776	13.629	.12678	-.00063
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	26.109	.00153	.03613	.00075	6.4716	-.00111	-.00395	11.269	24.116
#2	26.195	.00109	.03086	.00245	6.4669	-.00187	.00251	11.373	24.339
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00106	.18068	.00274	-.00002	-.00484	-.04338	-.00137	.00083	-.00048
#2	.00072	.18202	.00350	-.00009	-.00503	-.03823	-.00020	.00113	-.00100
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3041.7	52613.	6297.2						
#2	3047.0	52579.	6276.1						

Sample Name: 280-69735-A-39-C Acquired: 5/30/2015 15:59:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00031	As1890 ppm .00209	B_2089 ppm .00056	Ba4554 ppm .05447	Be3130 ppm .03150	Bi2230 ppm .00015	Ca3179 ppm 31.419	Cd2288 ppm .00017
#1	.00002	.00241	.00129	.05439	.03117	-.00018	-.00383	31.199	.00016
#2	-.00065	.00177	-.00242	.05456	.03182	-.00012	-.00084	31.638	.00017
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00007	Cu3247 ppm .00001	Fe2599 ppm .00002	K_7664 ppm 1.1864	Li6707 ppm 1.7873	Mg2790 ppm 0.1952	Mn2576 ppm 13.920	Mo2020 ppm .12309
#1	.00000	.00012	.00008	1.1740	1.7963	.01887	13.905	.12395	-.00099
#2	-.00015	-.00011	-.00004	1.1988	1.7784	.02016	13.934	.12223	-.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 26.063	P_1782 ppm .00127	Pb2203 ppm .03313	S_1820 ppm .00097	Sb2068 ppm 5.7825	Se1960 ppm -.00019	Si2881 ppm 0.0573	SiO2 ppm 11.116
#1	25.881	.00111	.02901	.00289	5.7114	-.00031	.00550	10.967	23.469
#2	26.245	.00142	.03725	-.00095	5.8535	-.00007	.00596	11.264	24.106
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00071	Th2837 ppm .18586	Ti3349 ppm .00175	Tl1908 ppm -.00017	U_3701 ppm -.00422	V_2924 ppm .00236	Zn2062 ppm -.00112	Zr3391 ppm .00049
#1	.00053	.18481	.00032	-.00028	-.00311	.00501	-.00101	.00017	-.00086
#2	.00089	.18691	.00319	-.00005	-.00533	-.00028	-.00122	.00081	-.00017
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3027.4	Y_3774 Cts/S 52700.	377.433 {89}	377.433 {89}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
#1	3030.2	52735.	6380.0						
#2	3024.7	52665.	6291.1						

Sample Name: 280-69735-A-49-C Acquired: 5/30/2015 16:01:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00033	As1890 ppm .00660	B_2089 ppm .00052	Ba4554 ppm .02156	Be3130 ppm .01856	Bi2230 ppm .00018	Ca3179 ppm .58.070	Cd2288 ppm .00102
#1	-.00007	.00652	-.00171	.02182	.01852	-.00014	-.00301	58.030	.00105
#2	-.00059	.00668	.00276	.02130	.01861	-.00023	-.00039	58.109	.00099
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00345	Cu3247 ppm .00043	Fe2599 ppm .00020	K_7664 ppm .01051	Li6707 ppm 2.0474	Mg2790 ppm .05693	Mn2576 ppm 33.810	Mo2020 ppm 1.6696
#1	.00362	.00058	.00025	.01126	2.0312	.05726	33.903	1.6731	-.00137
#2	.00327	.00028	.00016	.00977	2.0635	.05661	33.717	1.6661	-.00205
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 45.939	P_1782 ppm .01139	Pb2203 ppm .01314	S_1820 ppm -.00026	Sb2068 ppm 48.104	Se1960 ppm -.00057	Si2881 ppm 16.588	SiO2 ppm 35.498
#1	46.242	.01137	.01390	-.00051	48.132	-.00077	.00410	16.638	35.605
#2	45.637	.01140	.01237	-.00001	48.076	-.00037	.00347	16.537	35.390
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00171	Th2837 ppm .18560	Ti3349 ppm .00128	Tl1908 ppm .00000	U_3701 ppm -.00727	V_2924 ppm -.00025	Zn2062 ppm -.00180	Zr3391 ppm .00922
#1	.00239	.18565	-.00029	.00023	-.00717	.04027	-.00115	.00962	-.00051
#2	.00103	.18556	.00286	-.00023	-.00737	-.04078	-.00245	.00882	.00097
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2966.0	Y_3774 Cts/S 51812.	377.433 {89} 6338.0					
#1	2962.2	51764.	6326.9						
#2	2969.8	51859.	6349.1						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 16:04:25 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00746	Al3092 ppm 49.534	As1890 ppm -.00195	B_2089 ppm .00210	Ba4554 ppm .00073	Be3130 ppm -.00004	Bi2230 ppm 1.0427	Ca3179 ppm .03914	Cd2288 ppm -.00029	Co2286 ppm -.00021	Cr2055 ppm .00070
#1	-.00759	49.619	-.00154	.00208	.00079	-.00007	1.0406	.03899	-.00027	-.00001	.00063
#2	-.00733	49.449	-.00236	.00211	.00067	-.00001	1.0447	.03929	-.00031	-.00041	.00077
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00011	Fe2714 ppm 49.125	K_7664 ppm -.02236	Li6707 ppm -.00011	Mg2790 ppm .04680	Mn2576 ppm -.00114	Mo2020 ppm -.00052	Na8183 ppm 248.88	Ni2316 ppm .00225	P_1782 ppm .00902	Pb2203 ppm .00192
#1	-.00077	49.047	-.04850	.00016	.04706	-.00110	-.00065	249.36	.00268	.00698	.00237
#2	.00055	49.203	.00377	-.00038	.04653	-.00118	-.00038	248.40	.00182	.01107	.00147
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.1586	Sb2068 ppm -.01026	Se1960 ppm .00633	Si2881 ppm -.04564	SiO2 ppm -.09767	Sn1899 ppm -.00197	Sr4077 ppm .00040	Th2837 ppm 4.9672	Ti3349 ppm -.01258	Tl1908 ppm -.00129	U_3701 ppm W 10.505
#1	5.1109	-.00543	.00589	-.03981	-.08519	-.00155	.00045	4.9744	-.01289	-.00012	10.447
#2	5.2063	-.01509	.00677	-.05147	-.11015	-.00240	.00036	4.9600	-.01227	-.00245	10.563
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00245	Zn2062 ppm .00010	Zr3391 ppm -.12955								
#1	.00218	-.00001	-.12926								
#2	.00272	.00021	-.12985								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2977.8	Y_3600 Cts/S 51570.	Y_3774 Cts/S 6216.6								
#1	2983.1	51484.	6205.5								
#2	2972.5	51656.	6227.8								

Sample Name: CCV-3296664 Acquired: 5/30/2015 16:07:04 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49528	.54025	1.0151	.52735	.49132	.48687	-.00150	4.9206	.51773	.51423	.52285	.49755	2.4605
Stddev	.00063	.00628	.0279	.00833	.00505	.00557	.00277	.0696	.00411	.00902	.00633	.00182	.0403
%RSD	.12799	1.1618	2.7460	1.5792	1.0286	1.1438	184.76	1.4138	.79459	1.7545	1.2107	.36628	1.6357
#1	.49483	.53582	.99538	.52146	.48774	.48293	.00046	4.8714	.51482	.50785	.51837	.49627	2.4320
#2	.49573	.54469	1.0348	.53324	.49489	.49081	-.00346	4.9698	.52064	.52061	.52732	.49884	2.4889

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.917	.98736	19.715	.50206	.50500	5.0954	.50986	1.0562	1.0205	.00416	1.0445	1.0315	4.8128
Stddev	.567	.01430	.006	.00071	.00779	.0650	.00779	.0227	.0174	.00143	.0188	.0202	.1070
%RSD	1.1594	1.4486	.03056	.14065	1.5424	1.2757	1.5276	2.1525	1.7089	34.426	1.7968	1.9572	2.2236
#1	48.516	.97724	19.710	.50256	.49949	5.0495	.50436	1.0401	1.0082	.00314	1.0312	1.0172	4.7371
#2	49.318	.99747	19.719	.50157	.51051	5.1414	.51537	1.0722	1.0328	.00517	1.0577	1.0458	4.8885

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.299	1.0219	.49223	.00113	.49968	1.0483	-.03133	.50959	.49710	.48405
Stddev	.229	.0223	.00569	.00222	.00049	.0184	.01576	.00608	.00314	.01099
%RSD	2.2236	2.1830	1.1561	196.80	.09852	1.7584	50.302	1.1929	.63223	2.2703
#1	10.137	1.0062	.48821	.00270	.50003	1.0353	-.04247	.51389	.49932	.47628
#2	10.461	1.0377	.49626	-.00044	.49934	1.0614	-.02019	.50529	.49488	.49182

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass								
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Chk Pass									
Avg	3058.8	52715.	6277.0										
Stddev	13.5	58.	53.2										
%RSD	.44132	.11065	.84721										
#1	3068.3	52674.	6314.7										
#2	3049.2	52757.	6239.4										

Sample Name: CCB Acquired: 5/30/2015 16:09:31 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00030	Al1670 ppm -.00051	As1890 ppm -.00113	B_2089 ppm .00139	Ba4554 ppm -.00032	Be3130 ppm -.00015	Bi2230 ppm -.00251	Ca3179 ppm -.00103	Cd2288 ppm -.00005	Co2286 ppm .00050	Cr2055 ppm -.00023	Cu3247 ppm -.00034	Fe2599 ppm -.00228
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.04807	Li6707 ppm -.00214	Mg2790 ppm .00240	Mn2576 ppm -.00007	Mo2020 ppm .00007	Na5895 ppm .02923	Ni2316 ppm .00029	P_1782 ppm -.00062	Pb2203 ppm -.00081	S_1820 ppm .00113	Sb2068 ppm -.00021	Se1960 ppm .00305	Si2881 ppm .00323
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .00692	Sn1899 ppm .00080	Sr4077 ppm .00003	Th2837 ppm .00140	Ti3349 ppm .00000	TI1908 ppm -.00017	U_3701 ppm -.01901	V_2924 ppm -.00021	Zn2062 ppm .00013	Zr3391 ppm -.00111			
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3081.9	Y_3600 Cts/S 53723.	Y_3774 Cts/S 6319.7										
#1													
#2													

Sample Name: CCVL3301032 Acquired: 5/30/2015 16:11:54 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00947	.10901	.01517	.10725	.00995	.00078	.10546	.19747	.00522	.01075	.01082	.01478
Stddev	.00021	.00083	.00342	.00057	.00020	.00008	.00171	.00283	.00018	.00035	.00009	.00015
%RSD	2.2630	.75721	22.510	.52738	2.0019	9.7524	1.6229	1.4350	3.4618	3.2869	.86372	1.0277
#1	.00962	.10843	.01276	.10685	.01010	.00072	.10425	.19547	.00509	.01050	.01076	.01488
#2	.00932	.10960	.01759	.10765	.00981	.00083	.10667	.19947	.00535	.01100	.01089	.01467

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09827	2.9683	.00784	.20619	.01052	.02024	1.0647	.04170	3.0766	.00910	.00244	.01053
Stddev	.00240	.0807	.00154	.00065	.00005	.00025	.0244	.00089	.0609	.00094	.00225	.00099
%RSD	2.4463	2.7197	19.654	.31324	.51298	1.2323	2.2882	2.1337	1.9787	10.292	92.413	9.4507
#1	.09657	2.9112	.00893	.20573	.01048	.02007	1.0475	.04107	3.0336	.00976	.00084	.00982
#2	.09997	3.0254	.00675	.20665	.01056	.02042	1.0819	.04233	3.1196	.00843	.00403	.01123

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01543	.46082	.98616	.10497	.01012	.01869	.01036	.01600	.03785	.01016	.02216	.01403
Stddev	.00174	.00990	.02118	.00152	.00008	.00078	.00010	.00276	.03287	.00095	.00021	.00066
%RSD	11.267	2.1482	2.1482	1.4520	.80170	4.1545	.98280	17.237	86.847	9.3020	.94358	4.7357
#1	.01666	45382	.97118	.10389	.01006	.01814	.01043	.01795	.06110	.00949	.02231	.01356
#2	.01420	.46782	1.0011	.10604	.01018	.01924	.01028	.01405	.01461	.01083	.02201	.01450

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
	3111.8	53853.	6409.6
Avg	10.6	36.	6.4
Stddev	.33982	.06615	.09919
#1	3119.3	53828.	6405.1
#2	3104.3	53878.	6414.1

Sample Name: 280-69735-A-59-C Acquired: 5/30/2015 16:14:34 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.00703	-.00042	.02098	.06819	-.00007	-.00058	37.288	.00072
Stddev	.00004	.00025	.00859	.00030	.00018	.00003	.00106	.062	.00027
%RSD	9.5816	3.5352	2065.6	1.4338	.25955	41.228	183.21	.16749	37.873
#1	-.00050	.00721	-.00649	.02076	.06832	-.00009	.00017	37.332	.00092
#2	-.00043	.00686	.00566	.02119	.06806	-.00005	-.00133	37.244	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01094	.00038	.00003	.38172	.49348	.00346	30.064	2.6576	-.00142
Stddev	.00022	.00002	.00002	.00093	.00351	.00029	.373	.0353	.00035
%RSD	1.9832	6.4983	68.496	.24266	.71210	8.2767	1.2407	1.3269	24.844
#1	.01110	.00036	.00005	.38238	.49099	.00367	30.328	2.6825	-.00167
#2	.01079	.00039	.00002	.38107	.49596	.00326	29.801	2.6327	-.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.5152	.03197	.00624	.00077	22.054	-.00063	.00083	8.4910	18.171
Stddev	.0006	.00059	.00257	.00062	.200	.00099	.00139	.0104	.022
%RSD	.00896	1.8481	41.120	80.221	.90536	156.16	167.21	.12220	.12220
#1	6.5156	.03239	.00806	.00033	22.195	-.00133	.00181	8.4984	18.186
#2	6.5148	.03155	.00443	.00121	21.913	.00007	-.00015	8.4837	18.155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00196	.15128	.00105	.00002	-.00632	-.02357	-.00105	.01458	.00142
Stddev	.00031	.00022	.00003	.00034	.00052	.00708	.00035	.00060	.00010
%RSD	15.816	.14456	2.7342	1633.2	8.2993	30.023	32.873	4.1351	7.1097
#1	.00218	.15143	.00103	-.00022	-.00595	-.01856	-.00081	.01501	.00135
#2	.00174	.15112	.00107	.00026	-.00669	-.02857	-.00130	.01416	.00149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3095.2	53489.	6405.6						
Stddev	3.2	560.	19.8						
%RSD	.10190	1.0478	.30920						
#1	3097.4	53093.	6391.6						
#2	3092.9	53885.	6419.7						

Sample Name: 280-69813-A-1-B Acquired: 5/30/2015 16:17:13 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	.06695	.00016	.00808	.02547	-.00009	-.00163	6.0719	.00034
Stddev	.00048	.00099	.00747	.00020	.00030	.00008	.00101	.0381	.00003
%RSD	270.50	1.4799	4718.8	2.4557	1.1909	97.142	62.126	.62735	8.3740
#1	-.00051	.06625	.00544	.00822	.02526	-.00003	-.00091	6.0449	.00036
#2	.00016	.06765	-.00512	.00794	.02569	-.00015	-.00234	6.0988	.00032
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00037	.00038	-.00018	.13601	.99773	.00761	4.5510	.00188	-.00042
Stddev	.00012	.00014	.00019	.00032	.01034	.00034	.0399	.00006	.00058
%RSD	31.494	36.213	101.14	.23684	1.0363	4.4685	.87694	3.3515	136.91
#1	-.00029	.00047	-.00032	.13578	.99042	.00737	4.5228	.00184	-.00083
#2	-.00045	.00028	-.00005	.13624	1.0050	.00785	4.5792	.00193	-.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.707	.00295	.00483	-.00157	6.2841	-.00212	-.00037	9.3540	20.017
Stddev	.222	.00048	.00195	.00069	.0740	.00296	.00173	.0964	.206
%RSD	1.4150	16.113	40.422	44.208	1.1773	139.92	467.66	1.0300	1.0300
#1	15.865	.00329	.00345	-.00108	6.2318	-.00002	-.00159	9.2858	19.872
#2	15.550	.00261	.00621	-.00206	6.3364	-.00421	.00085	9.4221	20.163
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00050	.02959	.00050	.00142	-.00227	-.01052	-.00034	.00283	.00065
Stddev	.00270	.00037	.00027	.00078	.00352	.00703	.00017	.00031	.00116
%RSD	539.57	1.2557	53.339	55.123	154.79	66.806	50.345	11.005	178.22
#1	-.00241	.02933	.00069	.00087	.00021	-.01549	-.00022	.00305	.00147
#2	.00141	.02985	.00031	.00197	-.00476	-.00555	-.00046	.00261	-.00017
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3111.9	53994.	6428.3						
Stddev	16.8	61.	27.6						
%RSD	.54104	.11321	.42877						
#1	3123.8	53950.	6447.8						
#2	3100.0	54037.	6408.8						

Sample Name: 280-69813-A-7-B Acquired: 5/30/2015 16:19:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.11911	-.00643	.01107	.01965	.00044	-.00337	15.535	.00216
Stddev	.00056	.00018	.00131	.00044	.00010	.00013	.00229	.024	.00001
%RSD	230.61	.15162	20.351	3.9802	.52515	30.561	67.889	.15623	.25696
#1	-.00015	.11923	-.00735	.01076	.01972	.00034	-.00175	15.518	.00217
#2	.00064	.11898	-.00550	.01138	.01957	.00053	-.00499	15.552	.00216
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01959	.00023	.00054	.01131	2.3350	.05428	11.147	.43186	-.00062
Stddev	.00024	.00009	.00033	.00053	.0425	.00154	.025	.00067	.00005
%RSD	1.2214	37.749	61.926	4.6708	1.8204	2.8378	.21986	.15540	8.4265
#1	.01942	.00017	.00030	.01094	2.3050	.05319	11.164	.43234	-.00058
#2	.01976	.00029	.00077	.01169	2.3651	.05536	11.130	.43139	-.00065
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.654	.06684	.00370	-.00170	38.780	-.00072	.00156	20.255	43.346
Stddev	.305	.00006	.00082	.00034	.041	.00094	.00284	.264	.564
%RSD	.85426	.09087	22.037	20.196	.10641	131.88	181.86	1.3015	1.3015
#1	35.439	.06688	.00428	-.00195	38.809	-.00005	-.00045	20.069	42.947
#2	35.869	.06680	.00313	-.00146	38.750	-.00138	.00357	20.441	43.745
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00136	.06790	.00133	-.00008	-.00282	-.01789	-.00098	.07030	-.00053
Stddev	.00074	.00065	.00032	.00043	.00200	.01739	.00052	.00023	.00018
%RSD	54.674	.96447	23.860	525.78	70.908	97.195	53.349	.33201	34.743
#1	.00084	.06744	.00111	.00022	-.00141	-.03019	-.00061	.07046	-.00066
#2	.00189	.06836	.00156	-.00039	-.00423	-.00560	-.00135	.07013	-.00040
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3115.2	54316.	6519.8						
Stddev	.1	41.	21.3						
%RSD	.00286	.07634	.32745						
#1	3115.3	54287.	6534.9						
#2	3115.2	54345.	6504.7						

Sample Name: 280-69813-A-13-B Acquired: 5/30/2015 16:22:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279410 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.15952	.00206	.01315	.04071	.00011	.00081	.29.455	.00024
Stddev	.00018	.00088	.00308	.00157	.00025	.00004	.00194	.119	.00004
%RSD	61.501	.54973	149.15	11.953	.61994	39.948	240.48	.40451	16.823
#1	-.00043	.15890	-.00424	.01426	.04089	-.00008	.00056	29.539	.00021
#2	-.00017	.16014	.00011	.01204	.04053	-.00014	-.00218	29.370	.00027
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	.00091	.00061	.30774	1.0333	.00969	19.481	.01690	-.00125
Stddev	.00041	.00013	.00027	.00178	.0054	.00148	.004	.00017	.00024
%RSD	33.015	13.992	44.664	.57820	.52124	15.233	.02199	1.0140	18.887
#1	.00096	.00082	.00080	.30648	1.0295	.01073	19.484	.01702	-.00142
#2	.00154	.00099	.00042	.30900	1.0371	.00864	19.478	.01678	-.00108
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.082	.00556	.00811	.00135	35.707	-.00142	-.00103	10.053	21.513
Stddev	.043	.00012	.00054	.00046	.102	.00130	.00206	.032	.069
%RSD	.12966	2.0947	6.7013	34.116	.28446	90.916	199.54	.32287	.32287
#1	33.052	.00547	.00849	.00102	35.779	-.00234	.00042	10.030	21.464
#2	33.113	.00564	.00773	.00167	35.636	-.00051	-.00249	10.076	21.563
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.09208	.00327	.00332	-.00470	-.02371	-.00005	.00792	.00064
Stddev	.00053	.00010	.00093	.00007	.00282	.02280	.00008	.00030	.00076
%RSD	78.729	.10459	28.346	1.9599	60.107	96.166	175.79	3.8099	119.26
#1	.00030	.09215	.00392	.00336	-.00670	-.03983	-.00010	.00813	.00117
#2	.00105	.09202	.00261	.00327	-.00270	-.00759	.00001	.00771	.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3056.9	53086.	6361.4						
Stddev	3.0	48.	6.4						
%RSD	.09854	.08986	.10068						
#1	3059.0	53120.	6356.9						
#2	3054.7	53052.	6365.9						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 16:25:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00830	Al3092 ppm 48.851	As1890 ppm -.00289	B_2089 ppm .00079	Ba4554 ppm .00051	Be3130 ppm .00000	Bi2230 ppm 1.0273	Ca3179 ppm .03094	Cd2288 ppm -.00013	Co2286 ppm -.00021	Cr2055 ppm .00065
#1	-.00880	48.519	-.00117	.00100	.00032	.00002	1.0352	.03102	-.00006	-.00034	.00065
#2	-.00779	49.183	-.00461	.00058	.00071	-.00003	1.0194	.03086	-.00021	-.00008	.00065
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00002	Fe2714 ppm 48.854	K_7664 ppm -.05435	Li6707 ppm -.00087	Mg2790 ppm .04883	Mn2576 ppm -.00154	Mo2020 ppm -.00023	Na8183 ppm 245.87	Ni2316 ppm .00204	P_1782 ppm .00932	Pb2203 ppm .00270
#1	-.00013	48.139	-.04041	-.00166	.04986	-.00154	.00002	243.77	.00198	.00896	.00309
#2	.00016	49.569	-.06830	-.00007	.04779	-.00153	-.00048	247.96	.00209	.00967	.00230
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0329	Sb2068 ppm -.01045	Se1960 ppm .01017	Si2881 ppm -.03897	SiO2 ppm -.08341	Sn1899 ppm -.00072	Sr4077 ppm .00043	Th2837 ppm 5.0485	Ti3349 ppm -.01308	TI1908 ppm .00182	U_3701 ppm W 10.666
#1	5.0727	-.00787	.00814	-.05049	-.10806	-.00193	.00044	5.0821	-.01297	.00210	10.729
#2	4.9931	-.01303	.01221	-.02745	-.05875	-.00049	.00041	5.0148	-.01319	.00153	10.602
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00302	Zn2062 ppm -.00024	Zr3391 ppm -.13295								
#1	.00282	.00026	-.13597								
#2	.00322	-.00074	-.12992								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3027.2	Y_3600 Cts/S 51414.	Y_3774 Cts/S 6324.4								
#1	3038.7	51019.	6351.7								
#2	3015.7	51808.	6297.1								

Sample Name: CCV-3296664 Acquired: 5/30/2015 16:27:47 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .50417	Al1670 ppm .53607	As1890 ppm 1.0030	B_2089 ppm .52135	Ba4554 ppm .47844	Be3130 ppm .47318	Bi2230 ppm -.00027	Ca3179 ppm 4.7987	Cd2288 ppm .51004	Co2286 ppm .50769	Cr2055 ppm .51798	Cu3247 ppm .50827	Fe2599 ppm 2.3899
#1	.49851	.53727	1.0050	.52240	.47622	.47137	-.00303	4.7791	.51088	.50662	.51707	.50378	2.3746
#2	.50982	.53488	1.0010	.52030	.48067	.47500	.00250	4.8184	.50920	.50875	.51889	.51277	2.4052
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm 47.690	Li6707 ppm .95739	Mg2790 ppm 20.108	Mn2576 ppm .50956	Mo2020 ppm .49706	Na5895 ppm 4.9478	Ni2316 ppm .50248	P_1782 ppm 1.0452	Pb2203 ppm 1.0042	S_1820 ppm .00311	Sb2068 ppm 1.0321	Se1960 ppm 1.0143	Si2881 ppm 4.6797
#1	47.453	.95050	19.948	.50592	.49612	4.9266	.50240	1.0441	1.0006	.00722	1.0303	1.0131	4.6392
#2	47.927	.96429	20.269	.51320	.49800	4.9691	.50256	1.0463	1.0078	-.00100	1.0339	1.0156	4.7203
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 10.015	Sn1899 ppm 1.0135	Sr4077 ppm .47906	Th2837 ppm .00079	Ti3349 ppm .50694	TI1908 ppm 1.0294	U_3701 ppm .00810	V_2924 ppm .52009	Zn2062 ppm .49744	Zr3391 ppm .46930			
#1	9.9278	1.0114	.47675	.00148	.50422	1.0275	.00610	.51510	.49248	.46504			
#2	10.101	1.0156	.48137	.00011	.50967	1.0313	.01010	.52509	.50240	.47357			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3072.6	Y_3600 Cts/S 52086.	Y_3774 Cts/S 6358.4										
#1	3072.7	52350.	6361.1										
#2	3072.5	51822.	6355.7										

Sample Name: CCB Acquired: 5/30/2015 16:30:16 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00088 .00016 .00043	Al1670 ppm .00047 .00014 .00043	As1890 ppm -.00047 .00139 .00142 .00059	B_2089 ppm .00139 .00015 .00020 .00059	Ba4554 ppm -.00015 .00009 .00005 .00020	Be3130 ppm -.00009 .00149 .00005 .00005	Bi2230 ppm -.00149 .00190 .00065 .00065	Ca3179 ppm .00190 .00024 .00009 .00009	Cd2288 ppm -.00024 .00013 .00024 .00024	Co2286 ppm .00013 .00010 .00034 .00034	Cr2055 ppm .00010 -.00088 .00003 .00003	Cu3247 ppm -.00088 .00056 .00166 .00166	Fe2599 ppm .00056 -.00088 .00166 297.13	
#1	-.00091	.00047	-.00147	.00098	-.00001	-.00006	.00130	.00236	-.00018	.00031	-.00014	-.00087	-.00061	
#2	-.00086	-.00014	.00054	.00181	-.00029	-.00013	-.00429	.00144	-.00031	-.00004	.00035	-.00090	.00173	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.07661 -.00158 .02177 28.415	Li6707 ppm -.00059 -.00006 .00004 	Mg2790 ppm -.00509 -.00006 .00176 	Mn2576 ppm .00006 -.00024 .00003 	Mo2020 ppm .00024 -.03331 .00016 	Na5895 ppm .03331 -.00039 .00857 	Ni2316 ppm -.00039 -.00198 .00011 	P_1782 ppm .00198 -.00062 .00266 	Pb2203 ppm -.00062 -.00124 .00241 	S_1820 ppm .00124 -.00234 .00142 	Sb2068 ppm -.00234 -.00037 .00298 	Se1960 ppm .00037 -.02303 .00605 	Si2881 ppm -.02303 -.00163 .00163 	
#1	-.06122	-.00161	-.00633	.00003	.00035	.03937	-.00047	.00011	.00108	.00225	-.00445	-.00391	-.02418	
#2	-.09201	-.00155	-.00384	.00008	.00013	.02725	-.00031	.00386	-.00232	.00024	-.00023	.00465	-.02188	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.04929 .00349	Sn1899 ppm -.00003 -.00003	Sr4077 ppm .00006 -.00006	Th2837 ppm .00280 -.00010	Ti3349 ppm .00010 -.00066	TI1908 ppm .00016 -.02093	U_3701 ppm .00080 -.00062	V_2924 ppm .00924 -.00006	Zn2062 ppm .00016 -.00006	Zr3391 ppm .00046 -.00131				
#1	-.05175	-.00082	.00008	.00237	.00021	.00123	-.02747	-.00051	.00027	-.00176				
#2	-.04682	.00076	.00005	.00322	-.00001	.00010	-.01440	-.00074	-.00039	-.00085				
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass			
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3070.3	Y_3600 Cts/S 52491.	Y_3774 Cts/S 6231.3											
#1	3085.5	52301.	6220.6											
#2	3055.2	52681.	6241.9											

Sample Name: CCVL3301032 Acquired: 5/30/2015 16:32:38 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00984	.10755	.01414	.10650	.01001	.00082	.10525	.20180	.00508	.01081	.01048	.01507
Stddev	.00080	.00050	.00379	.00051	.00033	.00008	.00125	.00469	.00011	.00004	.00017	.00068
%RSD	8.0812	.46355	26.828	.47509	3.3386	10.170	1.1915	2.3260	2.2353	.33486	1.6698	4.5129

#1	.00928	.10720	.01145	.10614	.00977	.00076	.10614	.19848	.00500	.01084	.01035	.01459
#2	.01040	.10791	.01682	.10686	.01025	.00088	.10437	.20512	.00516	.01079	.01060	.01556

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09933	2.9910	.00876	.21375	.01063	.02019	1.0636	.04185	3.0382	.00728	.00053	.01000
Stddev	.00267	.0508	.00019	.00804	.00021	.00071	.0300	.00071	.0416	.00056	.00355	.00113
%RSD	2.6926	1.6989	2.2023	3.7598	1.9981	3.5077	2.8224	1.6905	1.3686	7.6755	665.18	11.270
#1	.09744	2.9550	.00862	.20807	.01048	.01969	1.0423	.04135	3.0088	.00689	.00304	.01080
#2	.10122	3.0269	.00889	.21943	.01078	.02069	1.0848	.04235	3.0676	.00768	-.00197	.00921

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01593	.48128	1.0299	.10417	.01025	.01848	.01015	.01554	.03986	.00958	.02175	.01511
Stddev	.00043	.02898	.0620	.00069	.00012	.00039	.00008	.00100	.00428	.00004	.00045	.00017
%RSD	2.6858	6.0215	6.0215	.66431	1.1763	2.1171	.79501	6.4379	10.749	.44166	2.0611	1.1272
#1	.01563	.46079	.98608	.10466	.01016	.01820	.01021	.01625	.04289	.00961	.02143	.01499
#2	.01624	.50177	1.0738	.10368	.01033	.01875	.01010	.01483	.03683	.00955	.02207	.01523

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3082.4	52792.	6183.6
Stddev	11.0	526.	2.9
%RSD	.35696	.99541	.04681
#1	3074.6	53164.	6185.7
#2	3090.2	52421.	6181.6

Sample Name: MB 280-279220/1-F Acquired: 5/30/2015 16:35:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00031	W .01721	-.00055	.00077	.00046	-.00017	.00002	W .11877	-.00028
Stddev	.00013	.00024	.00065	.00045	.00000	.00003	.00071	.00071	.00030
%RSD	40.035	1.4170	117.48	58.932	.57769	19.820	3611.8	.59473	105.66
#1	-.00023	.01738	-.00009	.00045	.00045	-.00015	.00052	.11827	-.00007
#2	-.00040	.01704	-.00101	.00109	.00046	-.00019	-.00048	.11926	-.00049
Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.01000	.01647					.02706		
Low Limit	-.00010	-.05000					-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.00004	F .03371	W .01901	-.03080	-.00136	.00528	W .00033	.00000
Stddev	.00030	.00044	.00017	.00162	.02183	.00089	.00839	.00007	.00004
%RSD	294.75	1215.3	.50195	8.5386	70.903	65.287	158.85	20.384	1485.0
#1	.00031	.00035	.03383	.01786	-.01536	-.00073	-.00065	.00038	.00003
#2	-.00011	-.00027	.03360	.02015	-.04624	-.00198	.01121	.00029	-.00003
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	.01000	.01710					.00023		
Low Limit	-.01000	-.05000					-.00500		
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00940	-.00004	.00363	-.00088	.00351	-.00174	-.00042	.00122	.00260
Stddev	.01313	.00016	.00099	.00062	.00033	.00142	.00198	.00061	.00131
%RSD	139.58	458.78	27.349	71.039	9.4870	81.753	467.38	50.507	50.507
#1	.01869	-.00015	.00293	-.00132	.00375	-.00275	.00098	.00165	.00353
#2	.00012	.00008	.00434	-.00044	.00328	-.00074	-.00183	.00078	.00167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	.00037	W .00126	.00019	-.00129	.00255	-.00028	.00250	.00032
Stddev	.00118	.00007	.00098	.00046	.00177	.03681	.00033	.00065	.00081
%RSD	205.70	18.167	77.560	240.44	137.07	1442.0	116.67	25.860	255.99
#1	-.00026	.00032	.00196	-.00013	-.00004	-.02348	-.00051	.00204	-.00026
#2	.00141	.00042	.00057	.00052	-.00254	.02858	-.00005	.00295	.00089
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00000								
Low Limit	-.00500								
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3126.9	53723.	6283.4						
Stddev	10.1	88.	38.1						
%RSD	.32367	.16390	.60705						
#1	3134.0	53785.	6310.3						
#2	3119.7	53661.	6256.4						

Sample Name: LCS 280-279220/2-F Acquired: 5/30/2015 16:37:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0004	As1890 ppm 1.0115	B_2089 ppm 1.0516	Ba4554 ppm 1.9467	Be3130 ppm .04772	Bi2230 ppm 2.0131	Ca3179 ppm 47.445	Cd2288 ppm .10292
#1	.04455	1.9985	1.0092	1.0497	1.9315	.04740	2.0056	47.097	.10277
#2	.04479	2.0023	1.0139	1.0534	1.9619	.04804	2.0206	47.793	.10307
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F .19792	Cu3247 ppm .27934	Fe2599 ppm .96286	K_7664 ppm 48.778	Li6707 ppm .97273	Mg2790 ppm 48.336	Mn2576 ppm .49053	Mo2020 ppm 1.0222
#1	.49178	.19809	.27861	.96259	48.496	.96658	48.283	.48977	1.0203
#2	.49269	.19775	.28007	.96314	49.060	.97888	48.389	.49130	1.0242
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 52.437	P_1782 ppm 48593	Pb2203 ppm 10.614	S_1820 ppm .50057	Sb2068 ppm 2.0611	Se1960 ppm .53411	Si2881 ppm 2.1077	SiO2 ppm 9.6625
#1	51.794	.48476	10.580	.49851	2.0610	.53389	2.0964	9.6245	20.597
#2	53.080	.48709	10.647	.50263	2.0613	.53432	2.1191	9.7004	20.759
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.0371	Th2837 ppm .97175	Ti3349 ppm .98429	Tl1908 ppm 2.0550	U_3701 ppm 2.0379	V_2924 ppm .50051	Zn2062 ppm .47287	Zr3391 ppm .45423
#1	2.0172	.96454	.98172	.98090	2.0354	2.0501	.50003	.47181	.45167
#2	2.0571	.97896	.98687	.98408	2.0746	2.0256	.50100	.47393	.45679
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2993.4	Y_3774 Cts/S 52113.	377.433 {89}					
#1	3000.1	52208.	6298.5						
#2	2986.6	52018.	6232.4						

Sample Name: 280-69591-A-1-C Acquired: 5/30/2015 16:40:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	.11953	-.00236	.02686	.04460	-.00008	.00042	26.561	-.00002
Stddev	.00010	.00168	.00327	.00021	.00048	.00001	.00071	.283	.00012
%RSD	13.603	1.4067	138.58	.77285	1.0861	7.8000	170.15	1.0660	558.37
#1	-.00081	.12072	-.00467	.02700	.04425	-.00008	.00092	26.361	.00006
#2	-.00067	.11834	-.00005	.02671	.04494	-.00009	-.00008	26.761	-.00011
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.00050	.00043	.11333	2.3052	.00777	7.0415	.01756	.00128
Stddev	.00013	.00004	.00004	.00208	.0507	.00038	.0009	.00015	.00014
%RSD	46.662	8.0991	10.165	1.8327	2.2009	4.9358	.01244	.83899	10.560
#1	-.00037	.00052	.00040	.11480	2.2693	.00804	7.0421	.01745	.00119
#2	-.00019	.00047	.00046	.11186	2.3411	.00750	7.0409	.01766	.00138
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.934	.00200	.01811	.00091	10.286	-.00178	.00258	5.1368	10.993
Stddev	.146	.00077	.00013	.00042	.028	.00019	.00020	.0686	.147
%RSD	.73463	38.545	.72858	45.782	.27513	10.395	7.7239	1.3357	1.3357
#1	20.037	.00145	.01821	.00121	10.266	-.00191	.00272	5.1853	11.097
#2	19.830	.00254	.01802	.00062	10.306	-.00165	.00244	5.0883	10.889
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	.22057	.00135	.00293	-.00375	-.01955	-.00025	.00199	-.00089
Stddev	.00055	.00220	.00236	.00042	.00051	.01440	.00033	.00035	.00113
%RSD	46.631	.99581	175.03	14.340	13.677	73.645	130.11	17.577	127.41
#1	.00156	.21902	.00302	.00263	-.00412	-.02973	-.00002	.00175	-.00009
#2	.00079	.22213	-.00032	.00323	-.00339	-.00937	-.00049	.00224	-.00169
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3005.5	52076.	6239.4						
Stddev	2.7	401.	30.1						
%RSD	.08902	.77039	.48296						
#1	3003.6	52360.	6260.7						
#2	3007.4	51792.	6218.1						

Sample Name: 280-69591-A-1-C SD@5 Acquired: 5/30/2015 16:42:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00042	As1890 ppm .02437	B_2089 ppm .00150	Ba4554 ppm .00587	Be3130 ppm .00879	Bi2230 ppm -.00017	Ca3179 ppm .00039	Cd2288 ppm 5.4803
#1	-.00023	.02450	-.00012	.00571	.00875	-.00013	.00252	5.5087	-.00042
#2	-.00062	.02425	.00312	.00603	.00882	-.00022	-.00173	5.4519	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00022	Cu3247 ppm -.00003	Fe2599 ppm .00067	K_7664 ppm .02729	Li6707 ppm .35150	Mg2790 ppm -.00145	Mn2576 ppm .14489	Mo2020 ppm .00349
#1	.00042	.00003	-.00052	.02665	.35711	-.00030	1.4390	.00346	.00023
#2	.00002	-.00009	-.00083	.02794	.34589	-.00260	1.4589	.00352	.00006
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 3.7039	P_1782 ppm .00038	Pb2203 ppm .00516	S_1820 ppm -.00200	Sb2068 ppm 2.0853	Se1960 ppm -.00228	Si2881 ppm .00330	SiO2 ppm .98166
#1	3.7162	.00040	.00286	-.00305	2.0741	-.00246	.00230	.97967	2.0965
#2	3.6915	.00036	.00747	-.00095	2.0966	-.00209	.00431	.98364	2.1050
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00129	Th2837 ppm .04505	Ti3349 ppm .00197	Tl1908 ppm -.00061	U_3701 ppm -.00152	V_2924 ppm -.04488	Zn2062 ppm .00033	Zr3391 ppm .00061
#1	.00093	.04510	.00182	.00085	-.00064	-.04770	.00039	.00090	-.00035
#2	.00164	.04500	.00212	.00037	-.00240	-.04207	.00026	.00033	.00027
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3068.3	Y_3774 Cts/S 52904.	377.433 {89}					
#1	3073.0	52919.	6250.6						
#2	3063.7	52889.	6253.8						

Sample Name: 280-69591-A-1-D MS Acquired: 5/30/2015 16:45:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.1039	As1890 ppm 1.0163	B_2089 ppm 1.0820	Ba4554 ppm 1.9747	Be3130 ppm .04752	Bi2230 ppm F 2.0220	Ca3179 ppm 73.300	Cd2288 ppm .10329
#1	.04480	2.1056	1.0167	1.0821	1.9715	.04735	2.0249	73.130	.10348
#2	.04533	2.1022	1.0158	1.0820	1.9778	.04770	2.0191	73.470	.10311
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .19720	Cu3247 ppm .25000	Fe2599 ppm 1.0597	K_7664 ppm 50.893	Li6707 ppm .97655	Mg2790 ppm 55.527	Mn2576 ppm .51337	Mo2020 ppm 1.0365
#1	.49186	.19713	.24883	1.0578	50.765	.97484	55.474	.51197	1.0380
#2	.49230	.19728	.25116	1.0617	51.021	.97825	55.580	.51477	1.0349
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 71.224	P_1782 ppm .48673	Pb2203 ppm W 10.755	S_1820 ppm .49726	Sb2068 ppm 12.902	Se1960 ppm .53428	Si2881 ppm 2.0793	SiO2 ppm 14.740
#1	71.078	.48724	10.772	.49650	12.903	.53291	2.0719	14.732	31.527
#2	71.370	.48623	10.738	.49802	12.900	.53565	2.0866	14.748	31.560
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0209	Th2837 ppm 1.1861	Ti3349 ppm 1.0023	Tl1908 ppm 1.0043	U_3701 ppm 2.0125	V_2924 ppm .2.0460	Zn2062 ppm .51109	Zr3391 ppm .47789
#1	2.0116	1.1843	.99694	1.0031	2.0024	2.0526	.50881	.47677	.45281
#2	2.0302	1.1878	1.0076	1.0056	2.0227	2.0395	.51337	.47901	.45193
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2954.6	Y_3774 Cts/S 51319.	377.433 {89}					
#1	2953.6	51356.	6306.9						
#2	2955.5	51283.	6215.3						

Sample Name: 280-69591-A-1-E MSD Acquired: 5/30/2015 16:47:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04397	2.0704	.99391	1.0539	1.9572	.04703	F 1.9599	72.866	.10062
Stddev	.00106	.0012	.00655	.0002	.0010	.00024	.0098	.250	.00060
%RSD	2.4152	.05568	.65896	.01568	.04909	.50271	.49913	.34255	.59431
#1	.04472	2.0712	.98928	1.0538	1.9578	.04720	1.9668	73.042	.10104
#2	.04322	2.0696	.99855	1.0541	1.9565	.04687	1.9529	72.689	.10019
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48399	W .19241	.24630	1.0446	50.402	.97130	54.794	.50546	1.0170
Stddev	.00043	.00010	.00061	.0000	.158	.00216	.090	.00093	.0003
%RSD	.08917	.05159	.24942	.00325	.31441	.22228	.16447	.18435	.02956
#1	.48430	.19234	.24587	1.0446	50.514	.97283	54.730	.50480	1.0172
#2	.48369	.19248	.24674	1.0446	50.290	.96977	54.858	.50612	1.0167
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	70.878	.47810	W 10.491	.48753	12.728	.51609	2.0110	14.665	31.383
Stddev	.288	.00156	.009	.00050	.022	.00322	.0241	.040	.086
%RSD	.40702	.32631	.08971	.10301	.17389	.62409	1.1975	.27277	.27277
#1	71.082	.47921	10.498	.48717	12.744	.51381	1.9940	14.693	31.444
#2	70.674	.47700	10.485	.48788	12.712	.51837	2.0281	14.637	31.323
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-1.0000							
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9766	1.1791	.98628	.98824	1.9588	2.0395	.50344	.46918	.44559
Stddev	.0079	.0016	.00208	.00001	.0002	.0312	.00086	.00197	.00146
%RSD	.40029	.13815	.21104	.00091	.00950	1.5304	.17064	.42062	.32787
#1	1.9710	1.1803	.98480	.98825	1.9589	2.0616	.50405	.46779	.44456
#2	1.9821	1.1780	.98775	.98824	1.9586	2.0174	.50284	.47058	.44662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2927.7	51251.	6319.8						
Stddev	1.8	221.	20.8						
%RSD	.06307	.43060	.32956						
#1	2929.0	51407.	6305.0						
#2	2926.4	51095.	6334.5						

Sample Name: 280-69591-A-2-E Acquired: 5/30/2015 16:50:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.09394	.00340	.03234	.04452	-.00014	-.00108	27.484	-.00005
Stddev	.00008	.00013	.00182	.00066	.00003	.00000	.00020	.090	.00007
%RSD	50.117	.13424	53.486	2.0312	.07828	2.4089	18.393	.32815	134.28
#1	.00011	.09403	.00468	.03280	.04450	-.00014	-.00123	27.420	.00000
#2	.00023	.09385	.00211	.03188	.04455	-.00014	-.00094	27.548	-.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.00007	.00069	.09490	2.6296	.00769	7.1881	.00193	.00134
Stddev	.00009	.00010	.00009	.00227	.0364	.00011	.0008	.00007	.00027
%RSD	48.723	133.49	12.419	2.3965	1.3855	1.3776	.01149	3.6270	20.436
#1	.00026	.00014	.00063	.09329	2.6038	.00761	7.1886	.00188	.00114
#2	.00013	.00000	.00075	.09651	2.6553	.00776	7.1875	.00198	.00153
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.804	.00202	.03173	.00219	11.059	-.00242	.00335	4.9268	10.543
Stddev	.132	.00039	.00169	.00104	.103	.00105	.00162	.0544	.117
%RSD	.60521	19.394	5.3189	47.612	.93267	43.493	48.428	1.1050	1.1050
#1	21.897	.00230	.03293	.00145	10.986	-.00316	.00220	4.8883	10.461
#2	21.711	.00175	.03054	.00292	11.132	-.00167	.00450	4.9653	10.626
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00123	.23167	.00278	.00271	-.00550	W -.06421	.00007	.00128	-.00037
Stddev	.00022	.00139	.00141	.00010	.00229	.00068	.00140	.00084	.00123
%RSD	18.136	.59783	50.868	3.5367	41.596	1.0573	2059.4	65.981	335.58
#1	.00107	.23069	.00178	.00278	-.00712	-.06373	.00106	.00188	-.00123
#2	.00138	.23265	.00378	.00265	-.00389	-.06469	-.00092	.00068	.00050
Check ? High Limit Low Limit	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3020.4	52317.	6251.2						
Stddev	4.5	86.	16.3						
%RSD	.14790	.16418	.26107						
#1	3017.3	52256.	6239.7						
#2	3023.6	52377.	6262.8						

Sample Name: 280-69591-A-3-C Acquired: 5/30/2015 16:52:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279377 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00012	.00307	.00094	.22291	.03724	-.00007	-.00019	98.163	.00006
#2	-.00070	.00313	.00095	.22673	.03690	-.00016	.00275	98.159	.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00031	.00021	.01701	.04258	15.026	.03817	23.351	.03929	.00079
#2	.00036	.00033	.01715	.04457	15.097	.03746	23.299	.03909	.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	146.41	.00457	1.6418	.00474	62.304	.00152	.01080	3.8851	8.3141
#2	145.65	.00446	1.6606	.00314	62.561	-.00254	.00956	3.9445	8.4411
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00094	1.0302	.00103	.00001	-.00604	-.02513	-.00090	.03169	.00041
#2	.00252	1.0308	.00014	-.00025	-.00749	-.01760	-.00097	.03414	.00129
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2927.3	50844.	6269.2						
#2	2929.0	50791.	6234.6						

Sample Name: 280-69834-A-1-A Acquired: 5/30/2015 16:55:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 167.079 {502}	As1890 ppm .00057	B_2089 ppm .02969	Ba4554 ppm .04782	Be3130 ppm -.00014	Bi2230 ppm -.00040	Ca3179 ppm 81.447	Cd2288 ppm 228.802 {447}
#1	-.00086	1.2008	-.00105	.03027	.04820	-.00012	-.00133	81.754	-.00002
#2	.00067	1.1991	.00219	.02910	.04744	-.00016	.00054	81.140	-.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm 205.560 {464}	Cu3247 ppm 324.754 {104}	Fe2599 ppm 259.940 {130}	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	.00096	.00260	.00310	2.1212	1.4798	-.00094	10.070	.29540	.00046
#2	.00077	.00265	.00261	2.1247	1.4871	-.00213	10.079	.29681	.00100
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 231.604 {446}	P_1782 ppm 178.284 {489}	Pb2203 ppm 220.353 {453}	S_1820 ppm 182.034 {485}	Sb2068 ppm 206.833 {463}	Se1960 ppm 196.090 {472}	Si2881 ppm 288.158 {117}2	SiO2 ppm 288.158 {117}2
#1	5.5106	.00382	.06066	.00650	1.0335	.00153	.00691	4.4477	9.5181
#2	.0094	.00068	.00057	.00153	.0016	.00113	.00471	.0442	.0946
	.16985	17.886	.93579	23.489	.15682	74.161	68.125	.99434	.99434
#1	5.5173	.00334	.06106	.00758	1.0346	.00233	.00358	4.4164	9.4512
#2	5.5040	.00430	.06025	.00542	1.0323	.00073	.01024	4.4790	9.5850
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 407.771 {83}	Th2837 ppm 283.730 {119}	Ti3349 ppm 334.904 {101}	Tl1908 ppm 190.856 {477}	U_3701 ppm 370.152 {91}	V_2924 ppm 292.402 {115}	Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	.00212	.13408	.00290	.02892	-.00585	-.00467	.00207	.06699	-.00020
#2	.00009	.00083	.00170	.00130	.00056	.01070	.00021	.00028	.00093
	4.0165	.61991	58.799	4.5122	9.5749	228.91	10.268	.41600	468.26
#1	.00218	.13467	.00410	.02799	-.00625	-.01224	.00222	.06719	.00046
#2	.00206	.13349	.00169	.02984	-.00546	.00289	.00192	.06679	-.00086
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 360.073 {943}	Y_3774 Cts/S 377.433 {89}						
#1	2980.0	51802.	6228.3						
#2	2976.5	51578.	6237.0						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 16:58:03 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -00744	Al3092 ppm 48.977	As1890 ppm -00212	B_2089 ppm .00302	Ba4554 ppm .00031	Be3130 ppm -00008	Bi2230 ppm 1.0290	Ca3179 ppm .03893	Cd2288 ppm -00034	Co2286 ppm -00058	Cr2055 ppm .00070
#1	-.00745	49.102	-.00142	.00327	.00031	-.00002	1.0370	.03550	-.00056	-.00072	.00074
#2	-.00744	48.851	-.00283	.00278	.00031	-.00013	1.0209	.04235	-.00012	-.00043	.00066
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00023	Fe2714 ppm 49.448	K_7664 ppm -.01651	Li6707 ppm -.00087	Mg2790 ppm .04963	Mn2576 ppm -.00163	Mo2020 ppm -.00050	Na8183 ppm 247.20	Ni2316 ppm .00203	P_1782 ppm .00566	Pb2203 ppm .00051
#1	-.00017	49.268	-.04173	-.00092	.05115	-.00163	-.00062	247.95	.00169	.00734	-.00026
#2	-.00029	49.627	.00872	-.00082	.04811	-.00162	-.00038	246.45	.00237	.00399	.00127
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0673	Sb2068 ppm -.00921	Se1960 ppm .00518	Si2881 ppm -.04526	SiO2 ppm -.09685	Sn1899 ppm -.00195	Sr4077 ppm .00030	Th2837 ppm 4.9354	Ti3349 ppm -.01296	TI1908 ppm .00076	U_3701 ppm W 10.526
#1	5.1529	-.00781	.00451	-.03737	-.07998	-.00170	.00029	4.9251	-.01324	-.00060	10.524
#2	4.9817	-.01060	.00585	-.05314	-.11372	-.00220	.00031	4.9456	-.01268	.00213	10.527
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00330	Zn2062 ppm -.00022	Zr3391 ppm -.12643								
#1	.00316	-.00035	-.12788								
#2	.00343	-.00009	-.12498								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2996.8	Y_3600 Cts/S 51481.	Y_3774 Cts/S 6154.0								
#1	3002.5	51479.	6126.4								
#2	2991.1	51482.	6181.5								

Sample Name: CCV-3296664 Acquired: 5/30/2015 17:00:41 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.50171	.54324	1.0134	.52864	.48211	.47690	-.00022	4.8182	.51651	.51532	.51548	.50450	2.4096
Stddev	.00271	.00292	.0047	.00225	.00449	.00308	.00010	.0444	.00190	.00449	.00261	.00071	.0258
%RSD	.54044	.53739	.45965	.42582	.93053	.64568	44.040	.92113	.36849	.87226	.50618	.14047	1.0689

#1	.49979	.54117	1.0167	.52705	.48528	.47907	-.00015	4.8496	.51517	.51214	.51363	.50501	2.4278
#2	.50362	.54530	1.0101	.53023	.47894	.47472	-.00029	4.7868	.51786	.51849	.51732	.50400	2.3914

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.978	.96420	19.974	.51054	.50504	5.0029	.51074	1.0571	1.0175	.00360	1.0403	1.0237	4.7493
Stddev	.309	.00552	.054	.00252	.00320	.0479	.00321	.0096	.0104	.00389	.0083	.0019	.0731
%RSD	.64353	.57280	.26834	.49269	.63371	.95696	.62770	.90860	1.0246	108.06	.79871	.18797	1.5389

#1	48.196	.96810	19.936	.50876	.50278	5.0368	.50848	1.0503	1.0101	.00085	1.0345	1.0223	4.8010
#2	47.760	.96029	20.012	.51231	.50731	4.9691	.51301	1.0639	1.0249	.00636	1.0462	1.0251	4.6976

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.163	1.0261	.48245	-.00119	.50861	1.0456	-.02180	.52137	.50328	.47141
Stddev	.156	.0078	.00432	.00107	.00173	.0100	.00114	.00315	.00529	.00639
%RSD	1.5389	.76114	.89634	90.424	.34080	.95396	5.2111	.60359	1.0512	1.3549

#1	10.274	1.0205	.48551	-.00043	.50738	1.0385	-.02100	.51915	.49954	.47593
#2	10.053	1.0316	.47939	-.00194	.50984	1.0526	-.02261	.52360	.50702	.46690

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3003.6	51573.	6293.5										
Stddev	6.8	112.	52.1										
%RSD	.22683	.21634	.82776										

#1	3008.4	51651.	6256.7										
#2	2998.7	51494.	6330.4										

Sample Name: CCB Acquired: 5/30/2015 17:03:09 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00033	Al1670 ppm -.00024	As1890 ppm .00335	B_2089 ppm .00234	Ba4554 ppm .00011	Be3130 ppm -.00017	Bi2230 ppm .00118	Ca3179 ppm -.00049	Cd2288 ppm -.00029	Co2286 ppm .00011	Cr2055 ppm -.00022	Cu3247 ppm -.00057	Fe2599 ppm .00144
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.03184	Li6707 ppm -.00163	Mg2790 ppm -.00338	Mn2576 ppm -.00009	Mo2020 ppm .00021	Na5895 ppm .04238	Ni2316 ppm -.00043	P_1782 ppm .00278	Pb2203 ppm -.00033	S_1820 ppm .00383	Sb2068 ppm -.00147	Se1960 ppm -.00258	Si2881 ppm -.01427
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.03053	Sn1899 ppm .00022	Sr4077 ppm .00008	Th2837 ppm .00162	Ti3349 ppm .00013	TI1908 ppm .00049	U_3701 ppm .01616	V_2924 ppm -.00029	Zn2062 ppm -.00014	Zr3391 ppm .00076			
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3015.5	Y_3600 Cts/S 52047.	Y_3774 Cts/S 6163.1										
#1													
#2													

Sample Name: CCVL3301032 Acquired: 5/30/2015 17:05:30 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01000	.11025	.01723	.10656	.01000	.00085	.10415	.20308	.00491	.01051	.01032	.01489
Stddev	.00062	.00007	.00051	.00129	.00021	.00004	.00089	.00207	.00018	.00009	.00020	.00075
%RSD	6.2147	.06691	2.9737	1.2081	2.1070	4.8985	.85473	1.0182	3.6018	.83348	1.9490	5.0451
#1	.00956	.11030	.01759	.10565	.01015	.00082	.10352	.20454	.00479	.01057	.01018	.01436
#2	.01044	.11020	.01687	.10747	.00985	.00088	.10478	.20162	.00504	.01045	.01046	.01542

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10562	3.0231	.00836	.21082	.01062	.02023	1.0981	.04141	3.0231	.00848	.00173	.00702
Stddev	.00044	.0502	.00235	.00739	.00008	.00019	.0156	.00007	.0236	.00003	.00653	.00179
%RSD	.41850	1.6618	28.070	3.5051	.74776	.93855	1.4234	.16865	.78134	.39172	378.40	25.522
#1	.10593	2.9876	.00670	.20559	.01057	.02010	1.1092	.04146	3.0064	.00846	-.00289	.00829
#2	.10530	3.0586	.01002	.21604	.01068	.02036	1.0871	.04136	3.0398	.00850	.00634	.00575

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01707	.47280	1.0118	.10451	.01029	.01797	.01032	.01545	F .04141	.01060	.02218	.01336
Stddev	.00362	.00524	.0112	.00020	.00002	.00332	.00024	.00167	.01824	.00071	.00029	.00025
%RSD	21.185	1.1092	1.1092	.19037	.19515	18.485	2.3711	10.812	44.031	6.6538	1.3192	1.8517
#1	.01452	46910	1.0039	.10465	.01031	.02032	.01049	.01426	.05431	.01110	.02198	.01353
#2	.01963	.47651	1.0197	.10437	.01028	.01562	.01014	.01663	.02852	.01010	.02239	.01318

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2995.8	52003.	6118.5									
Stddev	3.2	745.	13.6									
%RSD	.10534	1.4333	.22149									
#1	2993.6	52530.	6108.9									
#2	2998.1	51476.	6128.0									

Sample Name: MB 280-279359/1-A Acquired: 5/30/2015 17:08:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 .00045	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm
#1	-.00054	.01879	.00274	.00087	.00047	-.00014	.00233	.12679	-.00001
#2	.00003	.01931	-.00220	.00121	.00044	-.00013	-.00418	.12853	.00015
Check ? High Limit Low Limit	Chk Fail .01000	Chk Warn .01647	Chk Pass -.00010	Chk Pass -.05000	Chk Pass -.05000	Chk Pass -.05000	Chk Pass -.05000	Chk Warn .02706	Chk Pass -.10000
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 766.490 {44}	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm
#1	-.00010	-.00014	.03448	.02842	-.03769	-.00223	.00207	.00039	.00010
#2	.00024	-.00010	.03370	.02746	-.06578	-.00342	.01136	.00039	.00015
Check ? High Limit Low Limit	Chk Pass -.01000	Chk Fail .01000	Chk Fail -.01000	Chk Warn .01710	Chk Pass -.05000	Chk Pass -.05000	Chk Pass -.05000	Chk Warn .00023	Chk Pass -.05000
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm
#1	.03427	-.00002	.00334	-.00032	.00813	.00104	.00337	-.00815	-.01744
#2	.03500	-.00107	.00145	-.00036	.00498	-.00616	.00281	-.00353	-.00755
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00500	Chk Pass	Chk Pass	Chk Warn .07360	None
Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
#1	.00123	.00042	.00186	.00023	-.00167	.00028	.00014	.00349	-.00163
#2	.00065	.00043	.00364	.00020	.00074	-.00083	-.00069	.00343	-.00131
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .00000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500	Chk Pass -.00500
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S						
#1	3033.9	52605.	6108.1						
#2	3020.7	52030.	6108.3						

Sample Name: LCS 280-279359/2-A Acquired: 5/30/2015 17:10:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04433	2.0300	1.0158	1.0562	1.9658	.04841	2.0170	48.000	.10385
#2	.04442	2.0367	1.0165	1.0575	1.9544	.04839	2.0237	47.745	.10397
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49829	.19756	.28273	.98641	49.257	.98067	49.216	.50423	1.0412
#2	.49770	.19720	.28514	.99913	49.136	.98190	49.482	.50416	1.0401
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .28000 .04275 .21500	Chk Fail .28000 .21500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	53.319	.49247	10.666	.50858	2.0554	.53228	2.0897	9.8345	21.046
#2	53.929	.49273	10.697	.50532	2.0730	.53987	2.1085	9.9570	21.308
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0636	.98138	1.0081	1.0117	2.0478	2.0250	.51401	.48941	.46278
#2	2.0691	.97647	1.0105	1.0117	2.0699	2.1145	.51253	.48996	.46559
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2935.4	50273.	6122.6						
#2	2934.9	50872.	6157.9						

Sample Name: 280-69773-A-5-A Acquired: 5/30/2015 17:12:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00044	As1890 ppm .05944	B_2089 ppm .00104	Ba4554 ppm .14845	Be3130 ppm .05892	Bi2230 ppm -.00021	Ca3179 ppm -.00285	Cd2288 ppm 64.451
#1	-.00019	.05877	-.00039	.14659	.05862	-.00012	-.00290	64.410	-.00041
#2	-.00070	.06010	.00247	.15032	.05921	-.00031	-.00281	64.493	-.00043
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00731	Cu3247 ppm .00133	Fe2599 ppm .00673	K_7664 ppm .60003	Li6707 ppm 54.239	Mg2790 ppm .02543	Mn2576 ppm 18.737	Mo2020 ppm .08032
#1	.00732	.00133	.00646	.60770	54.142	.02611	18.725	.08035	.00144
#2	.00730	.00133	.00701	.59235	54.335	.02474	18.749	.08028	.00199
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 141.74	P_1782 ppm .00939	Pb2203 ppm W 2.7155	S_1820 ppm .00231	Sb2068 ppm 34.553	Se1960 ppm .00096	Si2881 ppm .00678	SiO2 ppm 6.1851
#1	141.78	.00947	2.7063	.00272	34.454	.00030	.00670	6.2541	13.384
#2	141.70	.00931	2.7246	.00191	34.652	.00163	.00686	6.1161	13.089
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00264	Th2837 ppm .41505	Ti3349 ppm .00410	Tl1908 ppm .00053	U_3701 ppm -.00629	V_2924 ppm -.03601	Zn2062 ppm -.00048	Zr3391 ppm .03137
#1	.00148	.41384	.00543	.00041	-.00619	-.05138	-.00069	.03061	.00042
#2	.00379	.41626	.00276	.00064	-.00639	-.02064	-.00027	.03214	.00020
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2928.6	Y_3774 Cts/S 50928.	377.433 {89}					
#1	2939.1	51050.	6236.0						
#2	2918.0	50805.	6243.4						

Sample Name: 280-69780-A-1-A Acquired: 5/30/2015 17:15:33 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00116	.02337	-.00309	1.7405	.08252	-.00008	-.00458	35.417	.00090
#2	.00173	.02397	-.00630	1.7465	.08274	-.00026	-.00177	35.387	.00134
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00274	.00182	1.2081	.08186	156.55	.09009	52.388	.00833	.12303
#2	-.00271	.00176	1.2108	.08077	156.23	.09012	52.435	.00836	.12459
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	2936.9	.01988	27.744	.00196	429.40	.00917	.02007	17.950	38.413
#2	2945.6	.02037	27.784	.00053	431.04	.00737	.01473	18.041	38.609
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.29132	.58225	.00022	.00031	-.00723	-.02008	-.00114	.02623	.00041
#2	.29135	.58271	.00151	-.00010	-.01114	-.05457	-.00218	.02666	.00124
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2583.2	43780.	5916.6						
#2	2595.9	43841.	5948.7						

Sample Name: 280-69780-A-1-A SD@5 Acquired: 5/30/2015 17:19:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00491	.00243	.37914	.01703	-.00021	-.00003	7.3487	-.00045
Stddev	.00049	.00012	.00282	.00127	.00011	.00010	.00144	.0432	.00002
%RSD	182.90	2.3810	116.33	.33513	.63359	48.691	4381.4	.58839	3.3752
#1	-.00008	.00483	.00043	.38004	.01695	-.00014	.00099	7.3181	-.00044
#2	.00062	.00499	.00442	.37824	.01710	-.00028	-.00105	7.3793	-.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00098	.00051	.24638	.02091	31.337	.01834	11.646	.00168	.02512
Stddev	.00020	.00005	.00012	.00348	.167	.00027	.056	.00003	.00016
%RSD	19.841	8.8648	.04776	16.645	.53329	1.4611	.48173	1.9934	.62616
#1	-.00112	.00054	.24647	.02337	31.219	.01815	11.607	.00170	.02523
#2	-.00085	.00048	.24630	.01845	31.455	.01853	11.686	.00165	.02501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 594.23	.00435	W 5.7175	-.00074	88.942	-.00173	.00050	3.5943	7.6918
Stddev	2.10	.00028	.0107	.00061	.277	.00005	.00118	.0654	.1399
%RSD	.35282	6.4086	.18803	83.606	.31146	2.9177	234.39	1.8190	1.8190
#1	592.74	.00415	5.7251	-.00030	88.746	-.00169	.00134	3.5481	7.5929
#2	595.71	.00455	5.7099	-.00117	89.138	-.00176	-.00033	3.6405	7.7908
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000						
Low Limit	11.000		-1.0000						
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06281	.11835	.00288	.00031	-.00145	-.03292	-.00161	.00607	-.00078
Stddev	.00115	.00065	.00181	.00014	.00023	.00330	.00019	.00080	.00009
%RSD	1.8266	.54616	62.705	43.726	16.116	10.031	12.128	13.216	12.051
#1	.06200	.11789	.00416	.00021	-.00162	-.03059	-.00174	.00664	-.00072
#2	.06362	.11881	.00160	.00041	-.00129	-.03525	-.00147	.00550	-.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2829.0	47929.	5972.0						
Stddev	5.8	23.	12.8						
%RSD	.20623	.04791	.21375						
#1	2833.2	47945.	5981.0						
#2	2824.9	47913.	5963.0						

Sample Name: 280-69780-A-1-B MS Acquired: 5/30/2015 17:22:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05085	1.8011	W 2.3912	1.0664	2.6472	2.0402	.04741	F 1.9450	80.934
Stddev	.00115	.0005	.0231	.0029	.0042	.0087	.00031	.0029	.231
%RSD	2.2701	.02741	.96413	.26999	.15891	.42450	.65721	.14975	.28551
#1	.05167	1.8014	2.3749	1.0684	2.6442	2.0463	.04763	1.9430	81.097
#2	.05003	1.8007	2.4075	1.0644	2.6501	2.0340	.04719	1.9471	80.771
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10699	.46800	W 16857	1.4438	1.0143	W 202.49	1.1153	95.128	.50613
Stddev	.00032	.00030	.00002	.0114	.0054	1.05	.0108	.526	.00155
%RSD	.29821	.06389	.01145	.79096	.53341	.51780	.96528	.55297	.30571
#1	.10677	.46779	.16856	1.4518	1.0181	203.23	1.1229	95.500	.50722
#2	.10722	.46821	.16859	1.4357	1.0104	201.75	1.1077	94.756	.50504
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1383	W 2945.6	.48083	W 37.749	.44255	F 423.38	.53536	2.2244	26.560
Stddev	.0016	10.7	.00080	.064	.00031	.03	.00338	.0088	.163
%RSD	.13912	.36355	.16620	.16993	.06977	.00713	.63088	.39749	.61462
#1	1.1372	2953.2	.48140	37.704	.44277	423.36	.53775	2.2182	26.675
#2	1.1394	2938.0	.48027	37.794	.44233	423.40	.53297	2.2307	26.445
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.839	W 2.1541	1.5535	1.0089	1.0164	1.6274	2.0406	.52014	.52091
Stddev	.349	.0003	.0086	.0123	.0034	.0025	.0217	.00158	.00335
%RSD	.61462	.01523	.55635	1.2175	.33354	.15459	1.0654	.30407	.64342
#1	57.086	2.1538	1.5596	1.0175	1.0188	1.6256	2.0253	.52125	.52328
#2	56.591	2.1543	1.5474	1.0002	1.0140	1.6292	2.0560	.51902	.51854
Check ?	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.45594								
Stddev	.00385								
%RSD	.84510								
#1	.45866								
#2	.45321								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69780-A-1-B MS Acquired: 5/30/2015 17:22:07 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279359 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2546.3	43612.	5924.7
Stddev	.7	83.	17.5
%RSD	.02751	.19000	.29541
#1	2546.8	43554.	5937.1
#2	2545.8	43671.	5912.4

Sample Name: 280-69780-A-1-C MSD Acquired: 5/30/2015 17:25:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05034	1.8098	W 2.4331	1.0732	2.6264	2.0583	.04778	F 1.9561	81.189
Stddev	.00017	.0077	.0205	.0024	.0142	.0100	.00039	.0061	.446
%RSD	.33415	.42417	.84084	.22527	.54062	.48460	.82264	.31063	.54888
#1	.05022	1.8152	2.4476	1.0715	2.6364	2.0654	.04805	1.9604	81.504
#2	.05046	1.8044	2.4186	1.0749	2.6164	2.0512	.04750	1.9518	80.874
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10753	.47004	W .17043	1.4352	1.0083	W 202.72	1.1228	95.064	.50956
Stddev	.00118	.00100	.00043	.0093	.0020	.89	.0035	.121	.00122
%RSD	1.0931	.21265	.25062	.64678	.20054	.44059	.30977	.12704	.23992
#1	.10836	.47075	.17012	1.4286	1.0098	203.35	1.1253	95.149	.51042
#2	.10670	.46933	.17073	1.4417	1.0069	202.09	1.1203	94.979	.50869
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1378	W 2941.2	.48201	W 37.714	.44456	F 420.65	.54236	2.2426	26.413
Stddev	.0037	7.6	.00068	.237	.00571	2.41	.00533	.0262	.062
%RSD	.32493	.25966	.14065	.62876	1.2842	.57378	.98256	1.1697	.23425
#1	1.1404	2946.6	.48249	37.882	.44860	422.36	.54613	2.2611	26.456
#2	1.1352	2935.8	.48153	37.547	.44053	418.94	.53860	2.2240	26.369
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.523	W 2.1730	1.5602	1.0211	1.0178	1.6455	2.0625	.52315	.52014
Stddev	.132	.0157	.0078	.0015	.0031	.0149	.0517	.00324	.00438
%RSD	.23425	.72175	.50195	.14959	.30879	.90631	2.5081	.61965	.84290
#1	56.617	2.1841	1.5658	1.0201	1.0200	1.6560	2.0991	.52545	.52324
#2	56.429	2.1619	1.5547	1.0222	1.0156	1.6349	2.0259	.52086	.51704
Check ?	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45308								
Stddev	.00106								
%RSD	.23463								
#1	.45383								
#2	.45233								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69780-A-1-C MSD Acquired: 5/30/2015 17:25:42 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279359 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2564.5	43657.	5895.2
Stddev	12.4	163.	41.2
%RSD	.48157	.37372	.69890
#1	2555.8	43542.	5866.1
#2	2573.2	43773.	5924.4

Sample Name: 280-69804-B-1-A Acquired: 5/30/2015 17:29:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00005	1.9528	-.00060	.01229	.02614	.00010	.00112	104.83	.00079
#2	.00030	1.9470	.00582	.00912	.02621	.00010	-.00063	105.56	.00080
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00612	.00072	.15519	1.0637	1.6046	.00338	7.8982	.74255	-.00120
#2	.00601	.00108	.15620	1.0983	1.7162	.00414	7.9299	.74649	-.00123
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	6.4455	.01116	.05924	.00568	98.540	.00158	.00312	5.1751	11.075
#2	.0011	.00025	.00278	.00179	.428	.00218	.00472	.0968	.207
#1	6.4463	.01133	.05727	.00695	98.843	.00004	-.00022	5.1066	10.928
#2	6.4448	.01098	.06120	.00441	98.237	.00312	.00646	5.2435	11.221
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00388	.29431	.00527	.00370	-.00512	-.05037	.00134	.15316	.00022
#2	.00415	.29610	.00508	.00418	-.01171	-.07213	.00036	.15199	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2978.4	51132.	6208.1						
#2	2962.6	51110.	6125.1						

Sample Name: 280-69804-B-2-A Acquired: 5/30/2015 17:31:56 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	1.7804	.00192	.01245	.02081	.00008	.00560	355.54	.00049
Stddev	.00053	.0082	.00279	.00080	.00035	.00007	.00022	1.46	.00012
%RSD	423.15	.46101	145.45	6.3890	1.6901	90.047	3.9212	.41046	23.306
#1	-.00050	1.7746	.00005	.01189	.02106	-.00012	.00544	354.50	-.00041
#2	.00025	1.7862	-.00389	.01302	.02056	-.00003	.00575	356.57	-.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00250	.00111	.03047	.12999	3.3985	.01907	19.990	1.1528	.00019
Stddev	.00011	.00007	.00049	.00299	.0066	.00028	.129	.0028	.00021
%RSD	4.2747	5.9216	1.6065	2.2969	.19503	1.4916	.64590	.24663	110.67
#1	.00257	.00107	.03082	.12788	3.3938	.01887	19.898	1.1508	.00033
#2	.00242	.00116	.03013	.13210	3.4032	.01927	20.081	1.1548	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.247	.00650	.07820	.00722	F 335.94	.00607	.00756	.31419	.67237
Stddev	.444	.00014	.00313	.00078	.51	.00137	.00464	.00227	.00486
%RSD	2.5768	2.2013	4.0038	10.871	.15183	22.646	61.347	.72224	.72224
#1	16.933	.00660	.07599	.00666	335.58	.00510	.01084	.31579	.67580
#2	17.562	.00640	.08041	.00777	336.30	.00704	.00428	.31259	.66893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00612	.84355	.00585	.00132	-.00567	-.04320	.00057	.01736	.00243
Stddev	.00053	.00397	.00076	.00000	.00090	.05764	.00036	.00135	.00120
%RSD	8.6115	.47070	12.941	.12414	15.949	133.45	62.426	7.7697	49.273
#1	.00649	.84075	.00531	.00132	-.00631	-.00244	.00083	.01831	.00159
#2	.00575	.84636	.00638	.00132	-.00503	-.08396	.00032	.01640	.00328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2827.1	50119.	6202.9						
Stddev	5.2	582.	39.4						
%RSD	.18228	1.1611	.63468						
#1	2830.7	50530.	6175.0						
#2	2823.4	49707.	6230.7						

Sample Name: 280-69804-B-3-A Acquired: 5/30/2015 17:34:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279359 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	35.465	.01723	.00631	.01323	.00553	.00126	204.05	.03856
Stddev	.00033	.163	.00078	.00126	.00003	.00009	.00031	.77	.00042
%RSD	29.521	.45884	4.5219	19.937	.24703	1.5947	24.743	.37503	1.0783
#1	-.00089	35.350	.01668	.00720	.01320	.00546	.00148	203.51	.03827
#2	-.00136	35.580	.01778	.00542	.01325	.00559	.00104	204.59	.03886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16220	.00388	7.2114	47.651	2.6648	.01626	33.127	9.7586	-.00379
Stddev	.00213	.00064	.0457	.295	.0855	.00009	.158	.0257	.00061
%RSD	1.3150	16.584	.63401	.61985	3.2090	.53794	.47759	.26372	16.159
#1	.16069	.00342	7.2438	47.442	2.6043	.01620	33.239	9.7768	-.00422
#2	.16371	.00433	7.1791	47.860	2.7252	.01632	33.015	9.7404	-.00336
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.980	.18234	.05178	.03516	F 319.54	-.00438	.00702	12.520	26.793
Stddev	.313	.00294	.00352	.00145	1.21	.00123	.00133	.073	.156
%RSD	2.4106	1.6143	6.8042	4.1289	.37774	27.949	19.025	.58122	.58122
#1	12.759	.18026	.05427	.03414	320.39	-.00525	.00607	12.469	26.683
#2	13.202	.18442	.04929	.03619	318.68	-.00352	.00796	12.572	26.903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00202	.84139	.00558	.00029	W -.01445	W -.07858	.00006	4.2515	.00088
Stddev	.00036	.00373	.00155	.00061	.00034	.00966	.00039	.0380	.00060
%RSD	18.026	.44309	27.715	210.04	2.3423	12.291	642.48	.89292	68.525
#1	.00177	.83876	.00448	.00072	-.01421	-.08541	-.00021	4.2784	.00131
#2	.00228	.84403	.00667	-.00014	-.01469	-.07175	.00033	4.2247	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.0000 -.05000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2943.4	51603.	6299.9						
Stddev	5.1	155.	55.5						
%RSD	.17264	.30016	.88108						
#1	2947.0	51494.	6339.2						
#2	2939.8	51713.	6260.7						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 17:37:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00699	49.846	.00269	.00416	.00061	.00002	1.0022	.08752	-.00040	-.00035	.00039	-.00060	49.725
Stddev	.00044	.782	.00346	.00027	.00023	.00019	.0057	.01177	.00006	.00031	.00025	.00033	1.024
%RSD	6.3234	1.5690	128.63	6.4252	37.302	816.29	.57407	13.447	14.700	88.440	63.765	55.568	2.0601
#1	-.00730	49.293	.00024	.00435	.00077	.00016	.99817	.09584	-.00036	-.00013	.00021	-.00036	49.001
#2	-.00668	50.399	.00514	.00397	.00045	-.00011	1.0063	.07920	-.00045	-.00058	.00056	-.00083	50.449

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.04244	-.00206	.04804	-.00023	-.00048	250.27	.00235	.00575	.00107	5.0146	-.01224	.01190	-.03570
Stddev	.02264	.00092	.00657	.00018	.00025	3.02	.00045	.00224	.00013	.0122	.00049	.00021	.00402
%RSD	53.350	44.601	13.671	78.669	50.551	1.2050	19.321	39.038	11.781	.24311	4.0013	1.7368	11.266
#1	.05845	-.00141	.05268	-.00010	-.00031	248.14	.00203	.00416	.00116	5.0060	-.01190	.01204	-.03855
#2	.02643	-.00271	.04340	-.00035	-.00066	252.40	.00267	.00733	.00098	5.0232	-.01259	.01175	-.03286

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.07640	-.00110	.00066	4.9302	-.01273	.00101	10.338	.00257	.00057	-.12626
Stddev	.00861	.00069	.00008	.1028	.00016	.00145	.140	.00096	.00011	.00691
%RSD	11.266	62.897	12.031	2.0845	1.2604	143.39	1.3586	37.300	20.268	5.4702
#1	-.08249	-.00061	.00072	5.0029	-.01284	.00203	10.438	.00189	.00065	-.13114
#2	-.07032	-.00158	.00061	4.8576	-.01262	-.00001	10.239	.00324	.00049	-.12138

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2947.4	50427.	5909.6
Stddev	14.0	622.	71.4
%RSD	.47385	1.2342	1.2084
#1	2957.2	49987.	5960.1
#2	2937.5	50867.	5859.1

Sample Name: CCV-3296664 Acquired: 5/30/2015 17:39:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48894	.54169	.99238	.51838	.48043	.47373	.00025	4.8199	.51130	.50708	.50332	.49082	2.4021
Stddev	.00111	.01306	.02516	.01262	.00009	.00023	.00047	.0045	.00989	.00627	.00109	.00183	.0018
%RSD	.22757	2.4112	2.5350	2.4342	.01912	.04948	187.20	.09231	1.9344	1.2374	.21588	.37382	.07522
#1	.48972	.55093	1.0102	.52731	.48037	.47357	.00058	4.8168	.51830	.51152	.50409	.49211	2.4034
#2	.48815	.53246	.97460	.50946	.48050	.47390	-.00008	4.8231	.50431	.50265	.50255	.48952	2.4008
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.076	.96729	19.594	.50401	.49761	5.1398	.50106	1.0425	1.0032	.02481	1.0204	1.0049	4.7936
Stddev	.145	.00128	.100	.00109	.00745	.0195	.00498	.0138	.0108	.00242	.0132	.0067	.0041
%RSD	.30198	.13271	.51000	.21629	1.4973	.37871	.99427	1.3279	1.0798	9.7700	1.2946	.67084	.08478
#1	47.973	.96638	19.664	.50324	.50287	5.1535	.50458	1.0523	1.0108	.02653	1.0298	1.0096	4.7908
#2	48.179	.96819	19.523	.50479	.49234	5.1260	.49753	1.0327	.99553	.02310	1.0111	1.0001	4.7965
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.258	1.0107	.48120	-.00200	.50055	1.0222	.00246	.51423	.49576	.47901			
Stddev	.009	.0091	.00015	.00109	.00083	.0059	.02837	.00126	.00227	.00080			
%RSD	.08478	.89724	.03090	54.352	.16544	.57883	1155.5	.24464	.45813	.16703			
#1	10.252	1.0171	.48130	-.00277	.50113	1.0264	.02252	.51512	.49736	.47845			
#2	10.265	1.0042	.48109	-.00123	.49996	1.0180	-.01761	.51334	.49415	.47958			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	2972.0	51235.	6100.8										
Stddev	38.8	27.	4.9										
%RSD	1.3045	.05262	.07969										
#1	2944.6	51216.	6097.3										
#2	2999.4	51254.	6104.2										

Sample Name: CCB Acquired: 5/30/2015 17:42:20 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00049	Al1670 ppm .00064	As1890 ppm -.00077	B_2089 ppm .00290	Ba4554 ppm -.00005	Be3130 ppm .00000	Bi2230 ppm .00287	Ca3179 ppm .00206	Cd2288 ppm -.00025	Co2286 ppm .00021	Cr2055 ppm -.00007	Cu3247 ppm -.00090	Fe2599 ppm -.00079
#1	.00007	.00065	-.00534	.00232	.00012	-.00003	.00206	.00226	-.00032	.00009	.00022	-.00051	-.00089
#2	-.00106	.00064	.00381	.00349	-.00021	.00004	.00367	.00186	-.00017	.00034	-.00037	-.00129	-.00069
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.01362	Li6707 ppm -.00100	Mg2790 ppm .00571	Mn2576 ppm -.00001	Mo2020 ppm .00016	Na5895 ppm .13686	Ni2316 ppm -.00046	P_1782 ppm .00087	Pb2203 ppm -.00134	S_1820 ppm .01605	Sb2068 ppm -.00253	Se1960 ppm .00252	Si2881 ppm -.01837
#1	-.00206	-.00073	.00911	.00003	.00006	.14109	-.00064	.00006	-.00084	.01515	-.00420	.01127	-.00911
#2	-.02518	-.00127	.00232	-.00004	.00025	.13264	-.00028	.00168	-.00183	.01694	-.00086	-.00623	-.02764
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.03932	Sn1899 ppm .00055	Sr4077 ppm .00018	Th2837 ppm .00377	Ti3349 ppm .00031	TI1908 ppm .00087	U_3701 ppm -.01242	V_2924 ppm -.00003	Zn2062 ppm .00049	Zr3391 ppm -.00139			
#1	-.01950	-.00024	.00026	.00287	.00039	-.00032	-.00310	-.00034	.00021	-.00060			
#2	-.05914	.00134	.00011	.00466	.00024	.00206	-.02174	.00027	.00077	-.00217			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2991.7	Y_3600 Cts/S 51874.	Y_3774 Cts/S 6080.6										
#1	3005.2	52027.	6084.0										
#2	2978.2	51720.	6077.2										

Sample Name: CCVL3301032 Acquired: 5/30/2015 17:44:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00919	.10936	.01159	.10747	.01008	.00082	.10432	.20004	.00527	.01089	.01051	.01477	.09677	2.9638
Stddev	.00037	.00028	.00048	.00125	.00007	.00007	.00113	.00036	.00029	.00018	.00013	.00001	.00066	.0626
%RSD	4.0492	.25955	4.1075	1.1619	.64805	7.9965	1.0800	.18241	5.5080	1.6151	1.2640	.07352	.68163	2.1140
#1														
#2														

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00747	.20929	.01046	.02009	1.1515	.04194	3.0801	.00886	.01624	.00735	.01547	.48079	1.0289	.10620
Stddev	.00064	.00168	.00006	.00015	.0169	.00017	.0276	.00071	.00191	.00569	.00389	.00904	.0193	.00144
%RSD	8.6204	.80115	.58590	.73611	1.4681	.41469	.89661	8.0319	11.777	77.329	25.114	1.8796	1.8796	1.3562
#1														
#2														

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01010	.01731	.00995	.01502	.04461	.01000	.02121	.01348
Stddev	.00018	.00072	.00000	.00267	.00232	.00021	.00136	.00124
%RSD	1.8067	4.1733	.02051	17.788	5.1908	2.1293	6.4111	9.1692
#1								
#2								

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3009.1	52065.	6059.2
Stddev	3.5	54.	4.0
%RSD	.11631	.10444	.06662
#1	3011.5	52104.	6056.3
#2	3006.6	52027.	6062.1

Sample Name: MB 280-279405/1-A Acquired: 5/30/2015 17:47:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279405 6010C Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00032	As1890 ppm .00355	B_2089 ppm .00039	Ba4554 ppm .00033	Be3130 ppm .00001	Bi2230 ppm .00011	Ca3179 ppm .01337	Cd2288 ppm .00046
#1	-.00050	.00361	.00015	.00280	-.00021	-.00003	-.00094	.01102	-.00051
#2	-.00015	.00348	-.00093	.00385	.00018	-.00019	-.00224	.01572	-.00042
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00010	Cu3247 ppm -.00013	Fe2599 ppm .00107	K_7664 ppm -.00513	Li6707 ppm -.00300	Mg2790 ppm -.00010	Mn2576 ppm -.00004	Mo2020 ppm .00003
#1	.00023	.00002	-.00059	.00247	-.00153	-.00298	-.00180	-.00002	-.00004
#2	-.00002	-.00028	-.00084	-.00032	-.00873	-.00302	.00159	-.00007	.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .09574	P_1782 ppm -.00042	Pb2203 ppm .00148	S_1820 ppm -.00060	Sb2068 ppm .01018	Se1960 ppm -.00256	Si2881 ppm -.00078	SiO2 ppm -.03796
#1	.10312	-.00062	.00086	.00002	.01133	-.00358	.00210	-.02833	-.06063
#2	.08836	-.00021	.00210	-.00122	.00904	-.00155	-.00366	-.00714	-.01528
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00153	Th2837 ppm .00003	Ti3349 ppm .00120	Tl1908 ppm -.00057	U_3701 ppm -.00034	V_2924 ppm .00019	Zn2062 ppm -.00023	Zr3391 ppm -.00036
#1	.00160	.00010	.00103	.00074	-.00201	-.01309	-.00078	.00039	.00003
#2	.00146	-.00004	.00137	.00039	.00134	.01348	.00032	.00032	-.00111
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3006.5	Y_3774 Cts/S 52511.	377.433 {89}					
#1	2999.5	52689.	6223.4						
#2	3013.5	52333.	6128.8						

Sample Name: LCS 280-279405/2-A Acquired: 5/30/2015 17:49:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04389	2.0103	1.0072	1.0515	1.9236	.04764	1.9998	46.507	.10350
#2	.04415	1.9971	1.0052	1.0456	1.9629	.04797	1.9847	47.561	.10284
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49603	.19519	.24737	.95053	48.319	.96454	49.113	.50820	1.0357
#2	.49537	.19526	.24660	.94506	49.478	.98515	49.018	.50378	1.0341
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	52.028	.48843	10.648	.50271	2.0460	.53116	2.0981	9.5591	20.457
#2	52.714	.48869	10.605	.50122	2.0326	.53008	2.0765	9.7159	20.792
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0692	.95886	1.0160	1.0167	2.0687	2.1220	.52186	.49167	.44964
#2	2.0722	.97857	1.0131	1.0105	2.0682	2.0399	.51424	.48774	.45624
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2904.0	49889.	6188.1						
#2	2912.7	50251.	6033.0						

Sample Name: LCSD 280-279405/3-A Acquired: 5/30/2015 17:52:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04573	2.0584	1.0253	1.0797	2.0066	.04991	2.0569	48.594	.10675
#2	.04494	2.0537	1.0256	1.0845	1.9919	.04847	2.0555	48.114	.10637
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.51045	.19949	.25392	.98634	50.545	1.0087	50.051	.51801	1.0652
#2	.50901	.19913	.25436	.97248	50.154	.99918	49.825	.51529	1.0638
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	54.382	.50371	10.981	.51573	2.0955	.54398	2.1030	9.8980	21.182
#2	54.571	.50337	10.955	.51209	2.0982	.54054	2.1320	9.8897	21.164
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn .54000 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0634	1.0016	1.0428	1.0366	2.0525	2.1111	.53205	.50181	.46173
#2	2.1133	.99308	1.0291	1.0345	2.0977	2.1308	.52792	.49550	.46715
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2885.0	49852.	6042.3						
#2	2889.4	50189.	6097.0						

Sample Name: 280-69768-C-11-B Acquired: 5/30/2015 17:54:32 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00055	As1890 ppm .00313	B_2089 ppm .00349	Ba4554 ppm .00494	Be3130 ppm .00135	Bi2230 ppm .00015	Ca3179 ppm .00050	Cd2288 ppm .03706
#1	-.00048	.00297	-.00189	.00476	.00134	-.00012	-.00130	.03811	-.00017
#2	-.00062	.00329	-.00510	.00513	.00137	-.00018	.00229	.03600	.00003
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00010	Cu3247 ppm -.00003	Fe2599 ppm .02220	K_7664 ppm .00769	Li6707 ppm -.01828	Mg2790 ppm -.00199	Mn2576 ppm .01366	Mo2020 ppm .00057
#1	.00017	.00017	.02228	.00906	.00188	-.00008	.01380	.00052	.00015
#2	.00002	-.00023	.02213	.00632	-.03844	-.00390	.01352	.00062	.00030
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .09175	P_1782 ppm .00012	Pb2203 ppm .00278	S_1820 ppm -.00021	Sb2068 ppm .01022	Se1960 ppm -.00133	Si2881 ppm -.00489	SiO2 ppm .11691
#1	.09663	.00027	.00380	-.00003	.00889	-.00003	-.00398	.12672	.27118
#2	.08687	-.00003	.00176	-.00040	.01155	-.00264	-.00579	.10710	.22918
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00013	Th2837 ppm .00030	Ti3349 ppm .00025	Tl1908 ppm .00028	U_3701 ppm .00138	V_2924 ppm -.01189	Zn2062 ppm .00018	Zr3391 ppm .00419
#1	.00037	.00035	.00404	.00052	.00311	-.01435	.00000	.00411	-.00032
#2	-.00011	.00025	.00110	.00003	-.00034	-.00943	.00036	.00427	-.00108
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2998.8	Y_3774 Cts/S 51906.	377.433 {89}					
#1	2998.6	52019.	6205.1						
#2	2999.0	51794.	6237.8						

Sample Name: 280-69768-C-11-BSD@5 Acquired: 5/30/2015 17:56:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.00051	.00109	.00349	.00044	.00006	.00270	.00988	.00031
Stddev	.00074	.00009	.00415	.00030	.00018	.00007	.00110	.00215	.00016
%RSD	243.60	17.731	380.63	8.5248	40.945	119.93	40.697	21.717	52.296
#1	-.00083	.00045	-.00402	.00370	.00057	-.00001	-.00192	.00836	-.00042
#2	.00022	.00058	.00184	.00328	.00031	-.00011	-.00348	.01140	-.00019
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	-.00002	.00375	-.00072	-.03415	-.00194	.00136	.00009	.00022
Stddev	.00014	.00012	.00010	.00246	.01995	.00113	.00471	.00006	.00012
%RSD	39.456	576.80	2.5718	343.20	58.414	58.201	346.86	63.717	54.012
#1	.00026	.00006	.00382	-.00245	-.02004	-.00114	.00469	.00013	.00031
#2	.00046	-.00010	.00368	.00102	-.04825	-.00273	-.00197	.00005	.00014
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07147	-.00002	.00151	.00007	.00856	-.00057	.00214	.01236	.02644
Stddev	.01925	.00022	.00288	.00031	.00408	.00221	.00204	.00071	.00152
%RSD	26.934	891.94	190.59	462.49	47.694	385.42	95.501	5.7445	5.7445
#1	.05786	.00013	-.00053	-.00015	.01145	-.00214	.00070	.01286	.02752
#2	.08509	-.00018	.00355	.00029	.00567	.00099	.00359	.01185	.02537
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	.00000	.00038	.00027	-.00189	-.02689	-.00025	.00086	.00048
Stddev	.00125	.00005	.00016	.00026	.00106	.02558	.00036	.00095	.00013
%RSD	141.21	1584.7	43.015	97.877	56.424	95.134	141.90	110.71	27.513
#1	.00000	.00004	.00049	.00008	-.00264	-.04498	.00000	.00154	.00038
#2	.00176	-.00003	.00026	.00045	-.00113	-.00880	-.00051	.00019	.00057
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2976.4	51576.	6106.8						
Stddev	14.0	106.	26.0						
%RSD	.46964	.20569	.42505						
#1	2966.5	51501.	6088.4						
#2	2986.3	51651.	6125.1						

Sample Name: 280-69768-C-11-B PDS Acquired: 5/30/2015 17:59:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04675	1.0151	.19399	.10482	.09775	.04729	.00208	18.470	.05055
#2	.04804	1.0156	.19899	.10575	.09765	.04706	-.00047	18.533	.05075
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.04889	.04876	.07014	.94651	18.945	.09475	19.073	.05005	.04775
#2	.04945	.04924	.07062	.94182	19.053	.09562	19.153	.05017	.04839
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	21.776	.05004	2.0362	.09977	.00812	.09705	.19888	4.8518	10.383
#2	20.773	.05045	2.0536	.10179	.00420	.09908	.19897	4.7559	10.178
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.09965	.04966	.19965	.04929	.19969	.52946	.04985	.20512	.04058
#2	.10133	.04854	.20099	.04938	.19966	.50633	.04999	.20180	.04199
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2951.2	50994.	6156.4						
#2	2948.2	51143.	6130.7						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 18:01:53 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00825	49.517	-.00294	.00303	.00044	-.00002	1.0241	.03487	-.00049	-.00050	.00074	-.00103	48.658
Stddev	.00047	.263	.00031	.00011	.00001	.00006	.0035	.00366	.00010	.00022	.00009	.00007	.011
%RSD	5.7470	.53134	10.552	3.4765	1.6422	275.77	.34579	10.496	21.094	43.928	11.899	6.9642	.02208
#1	-.00858	49.331	-.00316	.00310	.00045	-.00007	1.0216	.03229	-.00057	-.00034	.00068	-.00098	48.651
#2	-.00791	49.703	-.00272	.00296	.00044	.00002	1.0266	.03746	-.00042	-.00065	.00080	-.00108	48.666
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.00711	.00081	.04592	-.00155	-.00038	249.74	.00207	.00712	-.00007	5.0235	-.01194	.00494	-.03657
Stddev	.01210	.00124	.00694	.00000	.00001	1.01	.00006	.00436	.00018	.0052	.00313	.00310	.00175
%RSD	170.14	152.49	15.122	.15598	1.6683	.40573	2.7884	61.296	253.96	.10262	26.244	62.784	4.7927
#1	.00144	.00168	.04101	-.00155	-.00038	249.02	.00203	.00403	-.00020	5.0271	-.01415	.00275	-.03781
#2	-.01567	-.00006	.05084	-.00155	-.00039	250.45	.00212	.01021	.00006	5.0198	-.00972	.00713	-.03533
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.07826	-.00149	.00039	5.0370	-.01312	.00227	10.474	.00282	-.00009	-.13546			
Stddev	.00375	.00152	.00002	.0256	.00060	.00289	.078	.00042	.00007	.00375			
%RSD	4.7927	101.52	4.2160	.50747	4.5742	126.99	.74005	14.877	79.946	2.7697			
#1	-.08091	-.00257	.00038	5.0189	-.01270	.00023	10.529	.00252	-.00004	-.13281			
#2	-.07561	-.00042	.00040	5.0550	-.01355	.00432	10.419	.00312	-.00014	-.13811			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	2911.2	50060.	6032.3										
Stddev	6.4	232.	22.0										
%RSD	.21929	.46368	.36436										
#1	2915.7	50224.	6047.8										
#2	2906.7	49896.	6016.8										

Sample Name: CCV-3296664 Acquired: 5/30/2015 18:04:29 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48584	.53428	.99763	.51551	.51611	.50883	-.00026	5.1347	.50546	.50131	.50308	.49172	2.5599
Stddev	.00516	.00078	.00114	.00102	.03692	.03726	.00273	.4113	.00098	.00141	.00014	.00529	.2003
%RSD	1.0623	.14559	.11396	.19828	7.1538	7.3229	1039.8	8.0110	.19445	.28073	.02812	1.0755	7.8259
#1	.48949	.53483	.99683	.51478	.49000	.48248	.00167	4.8438	.50477	.50031	.50318	.49546	2.4183
#2	.48219	.53373	.99844	.51623	.54221	.53518	-.00219	5.4256	.50616	.50230	.50298	.48798	2.7016
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	51.538	1.0345	19.468	.50328	.49387	5.4156	.49774	1.0291	.98349	.01374	1.0046	.99026	5.0393
Stddev	3.723	.0748	.259	.00642	.00076	.3900	.00134	.0005	.00164	.00298	.0025	.00249	.4188
%RSD	7.2233	7.2322	1.3278	1.2766	.15365	7.2009	.26954	.04682	.16648	21.707	.25072	.25155	8.3104
#1	48.906	.98159	19.651	.50782	.49333	5.1399	.49679	1.0294	.98233	.01163	1.0028	.99202	4.7431
#2	54.170	1.0874	19.285	.49874	.49441	5.6914	.49869	1.0287	.98465	.01585	1.0063	.98850	5.3354
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.784	.99556	.51645	-.00157	.50073	1.0043	.00040	.51345	.49789	.50375			
Stddev	.896	.00426	.03753	.00147	.00607	.0038	.02287	.00793	.00593	.04241			
%RSD	8.3104	.42752	7.2679	93.423	1.2123	.37698	5773.7	1.5445	1.1900	8.4188			
#1	10.150	.99255	.48991	-.00053	.50502	1.0017	-.01577	.51905	.50208	.47376			
#2	11.418	.99857	.54299	-.00260	.49644	1.0070	.01656	.50784	.49370	.53374			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass		
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3001.0	51674.	5862.0										
Stddev	2.1	634.	334.1										
%RSD	.07043	1.2266	5.7003										
#1	3002.5	51226.	6098.3										
#2	2999.5	52122.	5625.7										

Sample Name: CCB Acquired: 5/30/2015 18:06:58 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00001	Al1670 ppm .00016	As1890 ppm -.00156	B_2089 ppm .00204	Ba4554 ppm .00007	Be3130 ppm -.00003	Bi2230 ppm .00175	Ca3179 ppm .00196	Cd2288 ppm -.00028	Co2286 ppm .00014	Cr2055 ppm -.00005	Cu3247 ppm -.00112	Fe2599 ppm -.00172
#1	.00005	.00020	-.00257	.00284	.00007	.00008	.00377	.00105	-.00038	.00005	-.00002	-.00111	-.00298
#2	-.00003	.00013	-.00055	.00125	.00007	-.00013	-.00027	.00287	-.00018	.00023	-.00008	-.00113	-.00045
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.03874	Li6707 ppm -.00162	Mg2790 ppm -.00276	Mn2576 ppm -.00004	Mo2020 ppm .00033	Na5895 ppm .06640	Ni2316 ppm -.00026	P_1782 ppm .00241	Pb2203 ppm -.00057	S_1820 ppm .00851	Sb2068 ppm -.00268	Se1960 ppm -.00095	Si2881 ppm -.04582
#1	-.06401	-.00174	-.00176	-.00005	.00023	.06065	-.00033	.00246	-.00082	.01014	-.00080	-.00113	-.03874
#2	-.01346	-.00151	-.00377	-.00003	.00043	.07215	-.00018	.00236	-.00032	.00688	-.00455	-.00077	-.05289
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.09805	Sn1899 ppm .00033	Sr4077 ppm .00001	Th2837 ppm .00187	Ti3349 ppm .00021	TI1908 ppm -.00065	U_3701 ppm -.03899	V_2924 ppm -.00023	Zn2062 ppm .00022	Zr3391 ppm .00100			
#1	-.08290	-.00001	.00003	.00163	-.00010	-.00121	-.03559	.00018	.00005	.00194			
#2	-.11319	.00068	-.00002	.00212	.00052	-.00008	-.04239	-.00064	.00039	.00005			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3020.0	Y_3600 Cts/S 51996.	Y_3774 Cts/S 6138.1										
#1	3021.3	52290.	6177.5										
#2	3018.8	51702.	6098.7										

Sample Name: CCVL3301032II Acquired: 5/30/2015 18:09:20 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00936	.10901	.01557	.10584	.01005	.00091	.10371	.19947	.00506	.01070	.01019	.01415	.09441	3.0074
Stddev	.00008	.00094	.00119	.00131	.00020	.00002	.00150	.00502	.00020	.00005	.00017	.00011	.00343	.0314
%RSD	.89061	.85776	7.6126	1.2345	1.9553	1.8240	1.4460	2.5178	3.8904	.48281	1.6348	.77701	3.6309	1.0439
#1	.00942	.10835	.01641	.10492	.01019	.00090	.10265	.19592	.00492	.01073	.01030	.01423	.09199	2.9852
#2	.00931	.10967	.01473	.10677	.00991	.00093	.10477	.20303	.00520	.01066	.01007	.01407	.09683	3.0296

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00849	.21486	.01047	.02009	1.1004	.04113	3.0275	.00832	.00547	.00795	.01557	.44309	.94822	.10358
Stddev	.00044	.00447	.00008	.00000	.0245	.00050	.0369	.00166	.00026	.00110	.00058	.02089	.04470	.00206
%RSD	5.1518	2.0803	.77666	.00267	2.2299	1.2244	1.2202	19.936	4.6823	13.771	3.7074	4.7143	4.7143	1.9841
#1	.00879	.21170	.01041	.02009	1.0831	.04077	3.0014	.00949	.00565	.00873	.01597	.42832	.91661	.10213
#2	.00818	.21802	.01053	.02009	1.1178	.04148	3.0536	.00715	.00529	.00718	.01516	.45786	.97983	.10504

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00994	.01635	.01045	.01509	.06111	.01012	.02247	.01342
Stddev	.00025	.00032	.00027	.00152	.01503	.00032	.00079	.00046
%RSD	2.4805	1.9842	2.6129	10.067	24.592	3.1554	3.5067	3.4547
#1	.00977	.01658	.01026	.01616	.07174	.01035	.02303	.01309
#2	.01011	.01612	.01064	.01402	.05048	.00990	.02191	.01375

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3004.4	52126.	6131.0
Stddev	26.8	65.	52.1
%RSD	.89224	.12443	.85003
#1	3023.3	52171.	6167.8
#2	2985.4	52080.	6094.1

Sample Name: MB 280-279404/1-A Acquired: 5/30/2015 18:12:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0001	.00228	-.00044	.00313	.00046	.00001	-.00089	.01462	.00003
Stddev	.00048	.00029	.00123	.00059	.00019	.00001	.00195	.00430	.00006
%RSD	4901.3	12.737	281.55	18.946	40.904	97.261	219.28	29.394	190.61
#1	.00033	.00249	.00043	.00271	.00060	.00001	.00049	.01765	.00008
#2	-.00035	.00207	-.00131	.00355	.00033	.00000	-.00226	.01158	-.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	-.00021	-.00052	.00634	-.03578	-.00179	.00079	.00011	.00011
Stddev	.00015	.00034	.00003	.00113	.05640	.00039	.00080	.00000	.00018
%RSD	85.785	165.46	5.9772	17.767	157.62	22.027	101.76	1.7085	157.98
#1	-.00007	-.00045	-.00050	.00555	-.07566	-.00151	.00136	.00011	-.00001
#2	-.00028	.00004	-.00054	.00714	.00410	-.00206	.00022	.00011	.00024
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05168	-.00022	.00219	-.00018	.01185	-.00139	.00161	-.02123	-.04544
Stddev	.00060	.00013	.00020	.00046	.00618	.00211	.00041	.00484	.01035
%RSD	1.1549	61.185	9.2367	251.64	52.115	151.89	25.357	22.782	22.782
#1	.05126	-.00012	.00205	-.00050	.01622	-.00288	.00132	-.02465	-.05276
#2	.05210	-.00031	.00233	.00014	.00748	.00010	.00190	-.01781	-.03812
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.00000	.00183	.00044	-.00216	-.01993	-.00022	.00068	.00043
Stddev	.00020	.00001	.00302	.00018	.00055	.01096	.00015	.00037	.00043
%RSD	31.942	297.21	164.92	41.558	25.471	54.993	69.408	53.639	101.68
#1	.00077	.00001	.00397	.00057	-.00255	-.01218	-.00032	.00094	.00012
#2	.00049	.00000	-.00030	.00031	-.00177	-.02768	-.00011	.00042	.00073
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3039.1	52283.	6183.5						
Stddev	2.3	18.	3.5						
%RSD	.07669	.03348	.05678						
#1	3037.5	52296.	6181.0						
#2	3040.8	52271.	6186.0						

Sample Name: LCS 280-279404/2-A Acquired: 5/30/2015 18:14:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04482	1.9969	1.0047	1.0480	1.9496	.04772	1.9978	47.151	.10337
#2	.04332	1.9946	1.0018	1.0421	1.9499	.04736	1.9862	47.062	.10240
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49356	.19479	.24653	.95108	49.048	.97964	48.568	.50016	1.0333
#2	.49229	.19347	.24758	.94746	48.973	.98160	48.778	.50105	1.0304
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	52.879	.48752	10.597	.49490	2.0341	.52833	2.0806	9.6626	20.678
#2	53.316	.48428	10.553	.49699	2.0443	.51890	2.0408	9.6990	20.756
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0464	.97125	.99923	1.0046	2.0471	2.0890	.51257	.48136	.45497
#2	2.0071	.97239	1.0065	1.0063	2.0081	2.1145	.51487	.48378	.46054
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2921.8	50637.	6120.2						
#2	2917.7	50411.	6116.6						

Sample Name: 280-69589-C-2-A Acquired: 5/30/2015 18:16:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00014	.16457	.00292	.05035	.19406	.00007	.00324	84.316	-.00057
#2	.00018	.16132	-.00592	.05030	.19238	-.00021	-.00203	83.896	-.00028
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00002	.00308	-.00003	.10702	1.0010	.01829	9.4763	.00982	-.00126
#2	-.00014	.00340	.00076	.10426	1.0506	.01766	9.4855	.00975	-.00107
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	59.920	.00273	.02249	.00230	8.1539	.00230	.00313	11.730	25.103
#2	60.639	.00288	.01858	.00275	8.0658	.00412	.00498	11.982	25.642
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00221	.70717	.00164	.00278	-.00651	-.02715	.00808	.00189	-.00061
#2	.00148	.70349	.00332	.00270	-.00651	-.04702	.00783	.00174	-.00046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2923.5	50834.	6094.7						
#2	2936.3	51037.	6183.6						

Sample Name: 280-69589-C-2-A SD@5 Acquired: 5/30/2015 18:19:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.03569	.00016	.01191	.04021	-.00018	-.00008	17.242	-.00022
Stddev	.00077	.00007	.00335	.00019	.00023	.00004	.00092	.008	.00003
%RSD	162.66	.18853	2106.5	1.5971	.57551	24.728	1172.6	.04926	15.495
#1	-.00101	.03574	-.00221	.01205	.04004	-.00015	.00057	17.236	-.00025
#2	.00007	.03565	.00253	.01178	.04037	-.00021	-.00073	17.248	-.00020
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.00090	-.00053	.02230	.19607	.00154	2.0109	.00202	-.00097
Stddev	.00019	.00020	.00011	.00222	.00876	.00075	.0241	.00006	.00015
%RSD	154.52	22.581	21.337	9.9407	4.4670	48.699	1.1996	2.9162	15.439
#1	-.00025	.00076	-.00045	.02074	.18988	.00207	2.0279	.00207	-.00108
#2	.00001	.00105	-.00061	.02387	.20226	.00101	1.9938	.00198	-.00087
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.792	.00142	.00647	.00121	1.5768	-.00227	.00036	2.4131	5.1640
Stddev	.314	.00015	.00092	.00103	.0023	.00287	.00181	.0560	.1198
%RSD	2.4539	10.219	14.155	85.416	.14782	126.43	498.24	2.3191	2.3191
#1	12.570	.00153	.00582	.00194	1.5752	-.00429	-.00092	2.3735	5.0793
#2	13.014	.00132	.00711	.00048	1.5785	-.00024	.00164	2.4527	5.2487
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.14514	.00453	.00071	-.00184	-.03442	.00141	-.00032	-.00067
Stddev	.00032	.00003	.00206	.00040	.00105	.00545	.00000	.00024	.00026
%RSD	17.835	.02314	45.535	56.302	57.313	15.838	.10250	74.364	39.106
#1	.00201	.14517	.00599	.00043	-.00259	-.03057	.00140	-.00015	-.00085
#2	.00156	.14512	.00307	.00100	-.00109	-.03828	.00141	-.00048	-.00048
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3003.6	51805.	6157.5						
Stddev	3.0	243.	32.7						
%RSD	.09965	.46994	.53157						
#1	3001.5	51977.	6134.4						
#2	3005.7	51633.	6180.7						

Sample Name: 280-69589-C-2-B MS Acquired: 5/30/2015 18:22:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04578	2.1952	W 2.5136	1.0315	1.1138	2.1868	.04887	F 2.0261	131.57
Stddev	.00004	.0007	.0117	.0037	.0080	.0111	.00020	.0122	.88
%RSD	.08198	.03118	.46404	.36005	.71857	.50912	.41697	.60320	.66908
#1	.04575	2.1947	2.5053	1.0289	1.1082	2.1789	.04872	2.0175	130.95
#2	.04580	2.1957	2.5218	1.0342	1.1195	2.1946	.04901	2.0347	132.19
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10456	.49405	W 19738	.25305	1.1077	51.647	1.0284	57.881	.51185
Stddev	.00084	.00326	.00031	.00005	.0154	.248	.0059	.072	.00061
%RSD	.80569	.65959	.15627	.01937	1.3928	.48006	.57792	.12421	.11841
#1	.10396	.49175	.19717	.25309	1.0968	51.472	1.0242	57.932	.51142
#2	.10516	.49635	.19760	.25302	1.1186	51.822	1.0326	57.831	.51228
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0464	113.17	.49167	W 10.934	.49755	10.173	.52891	2.0722	21.914
Stddev	.0054	.58	.00180	.069	.00408	.062	.00519	.0222	.139
%RSD	.51656	.51459	.36608	.63446	.82039	.61073	.98198	1.0714	.63291
#1	1.0426	112.76	.49039	10.885	.49466	10.129	.52524	2.0565	21.815
#2	1.0502	113.58	.49294	10.983	.50044	10.217	.53259	2.0879	22.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.895	W 2.0168	1.7074	1.0212	1.0245	1.9617	2.1088	.52615	.48183
Stddev	.297	.0148	.0086	.0029	.0034	.0103	.0105	.00086	.00041
%RSD	.63291	.73561	.50108	.28287	.33680	.52319	.49773	.16371	.08598
#1	46.685	2.0064	1.7013	1.0232	1.0220	1.9545	2.1014	.52554	.48153
#2	47.105	2.0273	1.7134	1.0191	1.0269	1.9690	2.1162	.52676	.48212
Check ?	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.46523								
Stddev	.00550								
%RSD	1.1827								
#1	.46133								
#2	.46912								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69589-C-2-B MS Acquired: 5/30/2015 18:22:07 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279404 6010C Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2889.0	50295.	6168.3
Stddev	.4	143.	25.1
%RSD	.01276	.28451	.40654
#1	2889.3	50397.	6186.1
#2	2888.7	50194.	6150.6

Sample Name: 280-69589-C-2-C MSD Acquired: 5/30/2015 18:24:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04485	2.1253	W 2.3957	.99648	1.0850	2.0893	.04684	F 1.9738	126.69
Stddev	.00035	.0029	.0089	.00345	.0017	.0048	.00015	.0050	.13
%RSD	.78321	.13664	.37152	.34592	.15707	.22954	.32053	.25341	.10447
#1	.04460	2.1274	2.3894	.99405	1.0862	2.0859	.04674	1.9774	126.60
#2	.04510	2.1233	2.4020	.99892	1.0838	2.0927	.04695	1.9703	126.78
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10155	.47786	W .19120	.24528	1.0263	49.381	.97978	56.273	.49730
Stddev	.00023	.00013	.00036	.00013	.0049	.039	.00097	.141	.00057
%RSD	.22497	.02769	.18849	.05380	.47304	.07997	.09855	.25126	.11472
#1	.10139	.47795	.19145	.24518	1.0297	49.353	.97910	56.373	.49770
#2	.10171	.47776	.19094	.24537	1.0229	49.408	.98047	56.173	.49690
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0125	109.12	.47326	W 10.622	.48128	9.9861	.52120	2.0430	21.180
Stddev	.0005	.22	.00013	.008	.00260	.0049	.00629	.0243	.050
%RSD	.04634	.20310	.02820	.07785	.53949	.04951	1.2071	1.1887	.23677
#1	1.0129	108.96	.47335	10.628	.47945	9.9896	.52565	2.0601	21.144
#2	1.0122	109.28	.47316	10.616	.48312	9.9826	.51675	2.0258	21.215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.325	1.9710	1.6383	.98776	.99532	1.9166	2.0179	.51357	.46790
Stddev	.107	.0302	.0014	.00083	.00037	.0255	.0140	.00101	.00116
%RSD	.23677	1.5311	.08479	.08449	.03763	1.3312	.69326	.19578	.24803
#1	45.249	1.9923	1.6374	.98835	.99506	1.9346	2.0278	.51428	.46872
#2	45.401	1.9496	1.6393	.98717	.99559	1.8985	2.0080	.51286	.46708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.44474								
Stddev	.00072								
%RSD	.16283								
#1	.44423								
#2	.44526								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69589-C-2-C MSD Acquired: 5/30/2015 18:24:30 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279404 6010C Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2883.3	50082.	6161.6
Stddev	5.4	158.	18.3
%RSD	.18817	.31539	.29658
#1	2887.2	49971.	6174.5
#2	2879.5	50194.	6148.7

Sample Name: 280-69589-C-2-A PDS Acquired: 5/30/2015 18:26:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04642	1.1298	.20137	.15145	.28474	.04730	.00362	100.57	.05081
Stddev	.00003	.0002	.00075	.00148	.00094	.00008	.00107	.45	.00001
%RSD	.06858	.01683	.37184	.97655	.33059	.16064	29.498	.44791	.02683
#1	.04644	1.1300	.20190	.15040	.28408	.04725	.00287	100.25	.05080
#2	.04639	1.1297	.20085	.15249	.28541	.04735	.00438	100.89	.05082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04732	.05082	.04817	1.0232	.20.131	.11524	.27.743	.05771	.04735
Stddev	.00019	.00006	.00064	.0022	.081	.00202	.154	.00035	.00043
%RSD	.39520	.11245	1.3324	.22036	.40233	1.7519	.55373	.59796	.91286
#1	.04745	.05086	.04862	1.0216	20.074	.11381	27.852	.05796	.04705
#2	.04719	.05078	.04771	1.0248	20.189	.11666	27.635	.05747	.04766
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.093	.05004	W 2.0947	.09747	7.9873	.09977	.20203	16.541	35.397
Stddev	.326	.00024	.0072	.00037	.0151	.00057	.00356	.206	.441
%RSD	.40707	.48278	.34458	.37616	.18881	.56688	1.7628	1.2461	1.2461
#1	79.863	.05022	2.0896	.09721	7.9766	.09937	.19952	16.395	35.085
#2	80.324	.04987	2.0998	.09773	7.9979	.10017	.20455	16.686	35.709
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09767	.74270	.19872	.05255	.18863	.50032	.05813	.19539	.04176
Stddev	.00015	.00297	.00033	.00005	.00068	.01861	.00021	.00450	.00064
%RSD	.15254	.39980	.16630	.09761	.36031	3.7206	.36420	2.3021	1.5255
#1	.09756	.74060	.19895	.05251	.18911	.51348	.05828	.19221	.04131
#2	.09778	.74480	.19848	.05258	.18815	.48715	.05798	.19857	.04221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2945.0	50776.	6246.2						
Stddev	1.8	271.	45.4						
%RSD	.06072	.53357	.72741						
#1	2946.2	50584.	6278.3						
#2	2943.7	50968.	6214.1						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 18:29:26 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00717	Al3092 ppm 48.656	As1890 ppm -.00166	B_2089 ppm .00360	Ba4554 ppm .00083	Be3130 ppm .00004	Bi2230 ppm 1.0180	Ca3179 ppm .03756	Cd2288 ppm -.00033	Co2286 ppm -.00012	Cr2055 ppm .00070
#1	-.00726	48.613	-.00230	.00394	.00083	-.00003	1.0219	.04146	-.00061	-.00051	.00041
#2	-.00708	48.698	-.00102	.00325	.00082	.00011	1.0141	.03367	-.00006	.00027	.00100
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00112	Fe2714 ppm 48.273	K_7664 ppm .05716	Li6707 ppm -.00134	Mg2790 ppm .04847	Mn2576 ppm -.00159	Mo2020 ppm -.00006	Na8183 ppm 246.52	Ni2316 ppm .00184	P_1782 ppm .00472	Pb2203 ppm .00138
#1	-.00110	47.933	.04325	-.00126	.05165	-.00151	.00032	246.71	.00210	.00482	.00220
#2	-.00113	48.612	.07107	-.00141	.04529	-.00167	-.00045	246.32	.00158	.00461	.00056
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0143	Sb2068 ppm -.01323	Se1960 ppm .00663	Si2881 ppm -.04835	SiO2 ppm -.10347	Sn1899 ppm -.00235	Sr4077 ppm .00035	Th2837 ppm 5.0027	Ti3349 ppm -.01267	TI1908 ppm .00279	U_3701 ppm W 10.622
#1	5.0434	-.01335	.00684	-.03728	-.07979	-.00225	.00039	5.0125	-.01272	.00244	10.645
#2	4.9851	-.01312	.00643	-.05941	-.12714	-.00244	.00031	4.9930	-.01263	.00315	10.599
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00235	Zn2062 ppm -.00036	Zr3391 ppm -.13261								
#1	.00219	.00003	-.13423								
#2	.00252	-.00074	-.13099								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2972.0	Y_3600 Cts/S 50951.	Y_3774 Cts/S 6238.4								
#1	2972.8	50796.	6263.1								
#2	2971.2	51106.	6213.6								

Sample Name: CCV-3296664 Acquired: 5/30/2015 18:32:05 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49867	.54328	1.0071	.52533	.48624	.47869	-.00112	4.8393	.51664	.51198	.50654	.50316	2.4007
Stddev	.00025	.00120	.0076	.00021	.00399	.00343	.00050	.0415	.00139	.00472	.00313	.00197	.0167
%RSD	.04934	.22097	.75349	.03969	.82147	.71752	44.839	.85755	.26823	.92144	.61885	.39200	.69453
#1	.49850	.54243	1.0124	.52548	.48342	.47626	-.00077	4.8100	.51762	.51532	.50876	.50176	2.3889
#2	.49885	.54413	1.0017	.52519	.48907	.48112	-.00148	4.8687	.51566	.50865	.50433	.50455	2.4125

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.489	.97559	19.860	.51068	.50194	5.1126	.50572	1.0492	1.0081	.00667	1.0336	1.0104	4.7798
Stddev	.242	.00533	.105	.00220	.00478	.0493	.00525	.0138	.0126	.00050	.0174	.0214	.0619
%RSD	.50002	.54632	.52737	.43016	.95179	.96453	1.0386	1.3195	1.2496	7.5310	1.6871	2.1202	1.2950
#1	48.318	.97183	19.786	.50912	.50532	5.0777	.50944	1.0590	1.0170	.00702	1.0459	1.0256	4.7360
#2	48.660	.97936	19.934	.51223	.49856	5.1475	.50201	1.0394	.99922	.00631	1.0212	.99528	4.8236

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.229	1.0193	.48546	.00208	.50881	1.0322	-.03514	.52231	.50243	.47276
Stddev	.132	.0156	.00418	.00024	.00324	.0134	.01004	.00283	.00325	.00659
%RSD	1.2950	1.5300	.86073	11.721	.63684	1.2985	28.559	.54198	.64592	1.3943
#1	10.135	1.0303	.48250	.00191	.50652	1.0417	-.04224	.52031	.50013	.46810
#2	10.322	1.0083	.48841	.00225	.51110	1.0227	-.02805	.52431	.50472	.47743

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Chk Pass							
Avg	2972.5	51132.	6152.1								
Stddev	6.5	124.	21.1								
%RSD	.21781	.24242	.34373								
#1	2967.9	51220.	6167.0								
#2	2977.1	51045.	6137.1								

Sample Name: CCB Acquired: 5/30/2015 18:34:34 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.00040	.00000	.00195	.00214	.00015	-.00018	-.00061	-.00034	-.00033	-.00007	-.00017	-.00024	-.00024
Stddev	.00066	.0002	.00401	.00092	.00008	.00006	.00229	.00331	.00004	.00021	.00009	.00016	.00003
%RSD	163.03	38826.	206.03	43.028	53.793	31.435	373.11	971.12	11.210	274.82	50.265	67.670	12.153

#1	.00006	.00014	.00478	.00279	.00009	-.00022	.00100	.00200	-.00031	-.00022	-.00023	-.00012	-.00022
#2	-.00087	-.00014	-.00089	.00149	.00020	-.00014	-.00223	-.00268	-.00036	.00007	-.00011	-.00035	-.00026

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.02417	-.00357	.00023	-.00010	.00024	.07148	-.00025	.00138	-.00137	-.00231	-.00045	-.00365	-.01174
Stddev	.01184	.00233	.00230	.00002	.00006	.01747	.00025	.00030	.00018	.00149	.00185	.00202	.00884
%RSD	48.994	65.262	990.45	20.049	26.755	24.437	101.78	21.757	13.444	64.597	414.24	55.424	75.259
#1	-.01580	-.00192	-.00140	-.00012	.00019	.05913	-.00007	.00159	-.00150	-.00125	.00086	-.00508	-.00549
#2	-.03254	-.00522	.00186	-.00009	.00028	.08383	-.00043	.00117	-.00124	-.00336	-.00175	-.00222	-.01799

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.02513	.00019	.00003	.00209	-.00010	-.00075	-.01244	-.00045	-.00029	-.00112			
Stddev	.01891	.00001	.00004	.00050	.00006	.00028	.01302	.00095	.00026	.00057			
%RSD	75.259	5.2530	118.02	23.684	55.055	36.984	104.66	208.93	90.944	50.483			
#1	-.01176	.00020	.00001	.00174	-.00006	-.00094	-.00323	.00022	-.00010	-.00152			
#2	-.03850	.00018	.00006	.00244	-.00014	-.00055	-.02165	-.00112	-.00048	-.00072			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	2993.1	51571.	6084.1										
Stddev	3.7	412.	11.2										
%RSD	.12343	.79954	.18344										
#1	2990.5	51863.	6092.0										
#2	2995.7	51280.	6076.2										

Sample Name: CCVL3301032II Acquired: 5/30/2015 18:36:57 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00973	.11058	.01270	.10904	.01029	.00089	.10527	.20814	.00528	.01078	.01020	.01466	.09851	3.0398
Stddev	.00054	.00083	.00128	.00084	.00003	.00002	.00038	.00194	.00015	.00009	.00004	.00052	.00158	.0428
%RSD	5.5835	.74848	10.117	.77345	.32576	2.8055	.36158	.93362	2.8324	.79558	.34546	3.5612	1.6082	1.4081
#1	.01011	.11117	.01361	.10844	.01031	.00087	.10554	.20951	.00517	.01084	.01018	.01503	.09739	3.0095
#2	.00934	.11000	.01179	.10963	.01027	.00090	.10500	.20676	.00538	.01072	.01023	.01429	.09963	3.0701

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00772	.21229	.01069	.01975	1.1077	.04174	3.0654	.00857	.00303	.00983	.01687	.47169	1.0094	.10373
Stddev	.00088	.00385	.00002	.00010	.0150	.00035	.0183	.00169	.00980	.00021	.00217	.01526	.0326	.00125
%RSD	11.373	1.8115	.17762	.50813	1.3579	.83603	.59726	19.686	322.84	2.1700	12.833	3.2342	3.2342	1.2048
#1	.00710	.21501	.01071	.01982	1.0971	.04149	3.0525	.00976	.00996	.00968	.01534	.46090	.98633	.10285
#2	.00834	.20957	.01068	.01968	1.1183	.04199	3.0784	.00738	-.00389	.00998	.01841	.48248	1.0325	.10462

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01014	.01753	.01025	.01665	.05133	.01012	.02214	.01441
Stddev	.00012	.00311	.00041	.00108	.03312	.00032	.00109	.00119
%RSD	1.1820	17.738	3.9817	6.5026	64.510	3.1254	4.9346	8.2297
#1	.01005	.01533	.01053	.01742	.07475	.00990	.02291	.01525
#2	.01022	.01972	.00996	.01589	.02792	.01034	.02136	.01357

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3030.2	51633.	6037.4
Stddev	6.0	199.	63.6
%RSD	.19639	.38522	1.0531
#1	3026.0	51492.	6082.3
#2	3034.5	51773.	5992.4

Sample Name: LB3 280-279181/1-B Acquired: 5/30/2015 18:39:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.02589	-.00232	.01917	.00040	-.00009	-.00068	.04178	-.00007
Stddev	.00028	.00068	.00253	.00003	.00005	.00003	.00110	.00243	.00003
%RSD	440.73	2.6272	109.31	.17129	11.395	30.359	162.60	5.8187	40.220
#1	.00026	.02541	-.00411	.01919	.00037	-.00007	-.00145	.04006	-.00010
#2	-.00013	.02637	-.00053	.01915	.00044	-.00011	.00010	.04350	-.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.00017	.00041	.01437	-.06716	-.00234	.00596	.00058	.00016
Stddev	.00055	.00017	.00020	.00194	.01686	.00226	.00044	.00013	.00018
%RSD	277.54	100.34	49.253	13.484	25.100	96.438	7.3817	22.917	108.79
#1	-.00019	.00005	.00026	.01574	-.05524	-.00393	.00565	.00067	.00029
#2	.00059	.00029	.00055	.01300	-.07908	-.00074	.00627	.00049	.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.9595	-.00080	.00582	-.00147	.03570	-.00086	-.00343	.03606	.07718
Stddev	.0139	.00032	.00217	.00017	.00300	.00116	.00017	.00203	.00433
%RSD	.70719	40.414	37.277	11.619	8.3983	134.27	4.9707	5.6150	5.6150
#1	1.9497	-.00057	.00428	-.00159	.03782	-.00168	-.00331	.03463	.07411
#2	1.9693	-.00103	.00735	-.00135	.03358	-.00004	-.00355	.03750	.08024
Check ? High Limit Low Limit	Chk Fail 1.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00025	.00276	-.00001	-.00150	-.01161	-.00060	.00354	.00062
Stddev	.00089	.00005	.00069	.00004	.00324	.01945	.00023	.00063	.00185
%RSD	964.99	20.255	24.894	443.24	216.22	167.52	39.336	17.953	298.33
#1	.00073	.00029	.00325	.00002	-.00379	-.02536	-.00043	.00309	-.00069
#2	-.00054	.00021	.00227	-.00003	.00079	.00214	-.00076	.00399	.00192
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3064.4	53363.	6307.5						
Stddev	8.7	91.	7.6						
%RSD	.28530	.16989	.12058						
#1	3058.2	53299.	6312.9						
#2	3070.6	53427.	6302.1						

Sample Name: LCS 280-279181/2-B Acquired: 5/30/2015 18:42:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .43117	As1890 ppm .76251	B_2089 ppm .21792	Ba4554 ppm 2.2608	Be3130 ppm .00918	Bi2230 ppm .39212	Ca3179 ppm 9.1077	Cd2288 ppm .22029
#1	.19772	.43168	.76194	.21742	2.2535	.00911	.39066	9.0749	.21959
#2	.19814	.43065	.76308	.21841	2.2681	.00924	.39358	9.1405	.22098
Check ? High Limit Low Limit	Chk Pass	Chk Warn .43200 1.7200	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F 1.0035	Cu3247 ppm .42608	Fe2599 ppm .21124	K_7664 ppm 9.6568	Li6707 ppm .19435	Mg2790 ppm 9.3385	Mn2576 ppm .09705	Mo2020 ppm .19756
#1	.09611	1.0034	.42545	.21072	9.7692	.19397	9.3341	.09710	.19780
#2	.09680	1.0037	.42671	.21176	9.5445	.19472	9.3429	.09701	.19732
Check ? High Limit Low Limit	Chk Pass	Chk Fail .25200 .16800	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm F 12.546	P_1782 ppm .09576	Pb2203 ppm 1.9904	S_1820 ppm 1.0816	Sb2068 ppm .39812	Se1960 ppm .10093	Si2881 ppm .58849	SiO2 ppm 1.9100
#1	12.438	.09572	1.9785	1.0817	.40182	.09989	.59379	1.9252	4.1200
#2	12.654	.09580	2.0024	1.0815	.39442	.10198	.58318	1.8948	4.0550
Check ? High Limit Low Limit	Chk Fail 11.200 9.1000	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail 4.9220 4.0200
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .38837	Th2837 ppm .18677	Ti3349 ppm .19297	Tl1908 ppm .19317	U_3701 ppm .39666	V_2924 ppm .36959	Zn2062 ppm .09745	Zr3391 ppm .46496
#1	.38685	.18612	.19337	.19324	.39719	.35035	.09739	.46881	.08989
#2	.38990	.18742	.19258	.19311	.39614	.38882	.09752	.46111	.08703
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3029.7	Y_3774 Cts/S 53111.	377.433 {89}					
#1	3028.3	53010.	6347.9						
#2	3031.2	53211.	6334.4						

Sample Name: 280-69681-A-1-C Acquired: 5/30/2015 18:44:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 ppm .00056	B_2089 ppm -0.00052	Ba4554 ppm .00600	Be3130 ppm .00003	Bi2230 ppm -0.00048	Ca3179 ppm 6.1093	Cd2288 ppm .04314
#1	.00127	1.6151	.00294	.28657	.00591	-.00004	-.00024	6.0703	.04305
#2	-.00015	1.6139	-.00397	.28724	.00608	.00010	-.00073	6.1483	.04323
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00024	.01749	.03732	1.1379	.92321	.00374	1.7974	.01511	.00086
#2	-.00023	.01796	.03691	1.1504	.94867	.00221	1.7940	.01472	.00077
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 ppm W 513.65	Pb2203 ppm .00460	S_1820 ppm .37729	Sb2068 ppm F 2444.0	Se1960 ppm .00073	Si2881 ppm .00374	SiO2 ppm .43329
#1	512.03	.00455	.08383	.37694	2445.2	-.00004	.00213	.42574	.91108
#2	515.28	.00465	.08431	.37763	2442.7	.00150	.00536	.44085	.94342
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass
					-.20000				
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 ppm .06801	Ti3349 ppm .00109	Tl1908 ppm .00640	U_3701 ppm -.00173	V_2924 ppm -.00631	Zn2062 ppm -.00016	Zr3391 ppm .79306
#1	.06713	.00945	.00153	.00618	-.00107	-.00958	-.00005	.80786	.02697
#2	.06888	.00957	.00066	.00662	-.00239	-.00304	-.00028	.77826	.02252
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 Cts/S 2931.4	377.433 {89} Cts/S 49962.					
#1	2934.4	49671.	6257.9						
#2	2928.5	50253.	6227.4						

Sample Name: 280-69681-A-1-C SD@5 Acquired: 5/30/2015 18:47:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.35776	.00071	.06002	.00118	-.00001	-.00120	1.2503	.00848
Stddev	.00012	.00206	.00189	.00019	.00012	.00001	.00047	.0241	.00012
%RSD	40.102	.57591	265.98	.31691	10.200	146.57	38.937	1.9283	1.4558
#1	-.00021	.35921	-.00063	.06015	.00110	.00000	-.00087	1.2333	.00856
#2	-.00038	.35630	.00205	.05988	.00127	-.00002	-.00153	1.2674	.00839
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00355	.00719	.23231	.19002	.00105	.39184	.00295	-.00005
Stddev	.00015	.00015	.00021	.00509	.00140	.00078	.00342	.00001	.00044
%RSD	185.34	4.1455	2.9660	2.1914	.73868	74.300	.87240	.39551	907.70
#1	.00018	.00345	.00734	.22871	.18902	.00050	.39426	.00294	.00026
#2	-.00002	.00366	.00703	.23591	.19101	.00160	.38943	.00295	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	107.96	.00128	.01560	.07874	F 644.21	-.00262	.00074	.08434	.18048
Stddev	1.71	.00016	.00222	.00008	1.31	.00167	.00148	.00668	.01430
%RSD	1.5819	12.490	14.215	.09753	.20380	63.995	199.24	7.9258	7.9258
#1	106.76	.00140	.01403	.07880	645.14	-.00380	.00179	.08906	.19060
#2	109.17	.00117	.01717	.07869	643.29	-.00143	-.00030	.07961	.17037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01530	.00187	.00151	.00133	-.00165	-.01209	-.00074	.16005	.00486
Stddev	.00167	.00000	.00141	.00038	.00114	.01668	.00016	.00142	.00059
%RSD	10.914	.01366	93.035	28.971	68.977	137.99	22.014	.88557	12.237
#1	.01648	.00187	.00052	.00106	-.00245	-.00029	-.00062	.15905	.00528
#2	.01412	.00187	.00251	.00160	-.00085	-.02388	-.00085	.16106	.00444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3012.7	52216.	6285.3						
Stddev	8.1	37.	8.2						
%RSD	.26912	.07073	.13035						
#1	3007.0	52243.	6291.1						
#2	3018.4	52190.	6279.5						

Sample Name: 280-69681-A-1-D MS Acquired: 5/30/2015 18:50:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .20266 .00130 .64115	As1890 ppm 1.9551 .0023 .11738	B_2089 ppm .79804 .00573 .71851	Ba4554 ppm 1.0107 .0053 .52674	Be3130 ppm .00940 .00014 1.4895	Bi2230 ppm F .37843 .00298 .78721	Ca3179 ppm 15.059 .083 .54974	Cd2288 ppm .27002 .00268 .99198
#1	.20358	1.9567	.80210	.47874	1.0145	.00949	.37633	15.117	.26813
#2	.20174	1.9534	.79399	.47943	1.0069	.00930	.38054	15.000	.27192
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm W .97350 .00101 .67867	Cu3247 ppm .46856 .00093 .19888	Fe2599 ppm 1.3099 .0086 .65387	K_7664 ppm 10.840 .018 .16582	Li6707 ppm .19992 .00024 .11998	Mg2790 ppm 10.607 .048 .45138	Mn2576 ppm .11130 .00021 .19257	Mo2020 ppm .19804 .00190 .95710
#1	.09389	.97421	.46922	1.3160	10.828	.20009	10.641	.11145	.19670
#2	.09480	.97279	.46790	1.3039	10.853	.19975	10.574	.11115	.19938
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Na8183 818.326 {41}	Ni2316 ppm W 520.58 .09790 3.06 .58793	P_1782 ppm W 2.1212 .00035 .0123 .35953	Pb2203 ppm 1.3082 .0104 .79239	S_1820 ppm F 2441.5 .0126 .04577	Sb2068 ppm 10276 .1 .34578	Se1960 ppm .69342 .00355 .2.8333	Si2881 ppm 2.2645 .0045 .19930	SiO2 ppm 4.8461 .0097 .19930
#1	522.74	.09766	2.1125	1.3009	2442.3	.10527	.67953	2.2677	4.8529
#2	518.41	.09815	2.1299	1.3156	2440.7	.10025	.70731	2.2613	4.8393
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .43488 .00668 1.5370	Th2837 ppm .19490 .00087 .44748	Ti3349 ppm .19613 .00253 1.2903	Tl1908 ppm .20515 .00011 .05298	U_3701 ppm .35308 .00133 .37733	V_2924 ppm .39380 .01634 4.1504	Zn2062 ppm .10097 .00034 .33641	Zr3391 ppm .12746 .0019 .15067
#1	.43015	.19552	.19792	.20508	.35214	.38224	.10073	1.2760	.11248
#2	.43961	.19428	.19434	.20523	.35403	.40536	.10121	1.2733	.11157
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2918.6 49572. .1 .00341	Y_3774 Cts/S 6284.1 31. 51.4 .81762	377.433 {89}	377.433 {89}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
#1	2918.6	49594.	6247.8						
#2	2918.5	49550.	6320.4						

Sample Name: 280-69681-A-1-E MSD Acquired: 5/30/2015 18:52:50 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .18973 .00029 .15411	As1890 ppm 1.8585 .0117 .62670	B_2089 ppm .75517 .00545 .72144	Ba4554 ppm 455.403 { 74}	Be3130 ppm .1444 .0014 .11796	Bi2230 ppm .00885 .00013 1.4557	Ca3179 ppm F .35766 .00425 1.1881	Cd2288 ppm 14.225 .030 .20960	
#1	.18994	1.8667	.75902	.45328	1.1453	.00894	.36067	14.246	.25756	
#2	.18953	1.8502	.75131	.45195	1.1434	.00876	.35466	14.204	.25163	
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm W .92346 .00082 .91559	Cu3247 ppm .43810 .00121 .13088	Fe2599 ppm 1.2696 .00124 .28387	K_7664 ppm 766.490 { 44}	Li6707 ppm 670.784 { 50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}	
#1	.08980	.92432	.43722	1.2740	10.222	.18969	10.001	.10495	.18906	
#2	.08864	.92261	.43898	1.2652	10.364	.18947	9.9764	.10515	.18616	
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev 	Na8183 818.326 { 41}	Ni2316 ppm 492.83 .38 .07729	P_1782 ppm .09342 .00143 1.5291	Pb2203 ppm 1.9983 .0231 1.1539	S_1820 ppm 182.034 {485}	Sb2068 ppm 206.833 {463}	Se1960 ppm 196.090 {472}	Si2881 ppm 288.158 {117}	SiO2 ppm 288.158 {117}2	
#1	493.09	.09443	2.0146	1.2573	2348.2	.09870	.66177	2.1675	4.6384	
#2	492.56	.09241	1.9820	1.2332	2327.3	.09487	.63817	2.2010	4.7100	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev 	Sn1899 189.989 {477}	Sr4077 ppm .40922 .00700 1.7116	Th2837 ppm .18483 .00029 .15474	Ti3349 ppm .18566 .00088 .47502	Tl1908 ppm .19357 .00041 .21257	U_3701 ppm .33554 .00543 1.6177	V_2924 ppm .35790 .01455 4.0643	Zn2062 ppm .09454 .00005 .05449	Zr3391 ppm 1.2063 .0071 .59110	
#1	.41418	.18504	.18628	.19386	.33938	.34762	.09457	1.2113	.10808	
#2	.40427	.18463	.18503	.19328	.33170	.36819	.09450	1.2013	.10433	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2926.7	Y_3774 Cts/S 49921.	377.433 { 89}						
#1	2918.3	49767.	6245.9							
#2	2935.1	50075.	6315.3							

Sample Name: 280-69681-A-1-C PDS Acquired: 5/30/2015 18:55:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279384 6010C

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.04799	2.3844	2.6874	.20255	.37691	.09910	.04616	-.00147	23.477
#2	.04766	2.3683	2.6487	.20241	.37004	.09787	.04578	.00586	23.339
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}	Mn2576 257.610 {131}
#1	.09251	.04616	.06392	.08243	1.9725	19.930	.09831	18.917	.06172
#2	.09084	.04591	.06363	.08145	1.9714	19.912	.10004	18.844	.06152
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	.04696	516.20	.05126	2.0857	.45449	2365.8	.09489	.22058	5.0361
#2	.04674	512.79	.05131	2.0789	.44575	2351.8	.09490	.22396	5.0697
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	10.777	.15744	.05643	.19802	.05502	.17313	.47232	.04921	.95656
#2	10.849	.15579	.05615	.19703	.05531	.16984	.50962	.05022	.95605
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	.06379								
#2	.06552								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69681-A-1-C PDS Acquired: 5/30/2015 18:55:25 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279384 6010C

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2988.1	50931.	6499.6
Stddev	7.8	182.	5.4
%RSD	.26192	.35707	.08314
#1	2982.5	50802.	6503.4
#2	2993.6	51059.	6495.7

Sample Name: CCVH-3294468 Acquired: 5/30/2015 18:58:03 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-0.00755	48.466	-0.00086	.00322	.00063	-.00003	.99421	.02643	-.00029	-.00029	.00072	-.00155	47.888
Stddev	.00035	.808	.00303	.00068	.00016	.00000	.00060	.00314	.00023	.00036	.00024	.00046	1.005
%RSD	4.5807	1.6667	352.05	20.949	24.958	1.7155	.06022	11.871	80.794	122.33	32.890	29.583	2.0995
#1	-.00780	47.895	-.00300	.00275	.00074	-.00003	.99379	.02421	-.00045	-.00055	.00055	-.00188	47.177
#2	-.00731	49.037	.00128	.00370	.00052	-.00003	.99464	.02865	-.00012	-.00004	.00088	-.00123	48.599
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.07676	-.00070	.04485	-.00156	-.00060	246.45	.00254	.00854	.00070	5.2336	-.01266	.00478	-.04052
Stddev	.06602	.00095	.00832	.00005	.00009	2.92	.00006	.00031	.00052	.0259	.00203	.00053	.00074
%RSD	86.001	134.32	18.559	3.2583	15.056	1.1842	2.3473	3.6273	74.336	.49409	16.062	11.026	1.8308
#1	.03008	-.00004	.05074	-.00160	-.00054	244.38	.00259	.00876	.00107	5.2519	-.01410	.00441	-.04000
#2	.12344	-.00137	.03897	-.00153	-.00067	248.51	.00250	.00832	.00033	5.2153	-.01123	.00515	-.04105
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.08672	-.00130	.00040	4.8315	-.01216	.00304	10.199	.00364	-.00078	-.12399			
Stddev	.00159	.00039	.00010	.0043	.00026	.00070	.003	.00010	.00017	.00082			
%RSD	1.8308	30.003	26.087	.08822	2.1380	23.114	.03380	2.6527	21.284	.65789			
#1	-.08560	-.00158	.00032	4.8345	-.01235	.00254	10.196	.00371	-.00090	-.12457			
#2	-.08785	-.00103	.00047	4.8285	-.01198	.00353	10.201	.00357	-.00066	-.12341			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3029.3	52257.	6383.1										
Stddev	27.6	30.	207.0										
%RSD	.91118	.05685	3.2423										
#1	3048.8	52236.	6529.5										
#2	3009.7	52278.	6236.8										

Sample Name: CCV-3296664 Acquired: 5/30/2015 19:00:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .48149	Al1670 ppm .53012	As1890 ppm .98970	B_2089 ppm .51492	Ba4554 ppm .48231	Be3130 ppm .47507	Bi2230 ppm -.00022	Ca3179 ppm 4.8086	Cd2288 ppm .50432	Co2286 ppm .49581	Cr2055 ppm .51272	Cu3247 ppm .48511	Fe2599 ppm 2.3990
#1	.47930	.53004	.99261	.51427	.47759	.46976	.00041	4.7613	.50385	.49631	.51320	.48491	2.3821
#2	.48368	.53021	.98679	.51557	.48704	.48038	-.00086	4.8560	.50479	.49532	.51225	.48530	2.4159
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm 48.196	Li6707 ppm .96902	Mg2790 ppm 19.114	Mn2576 ppm .49170	Mo2020 ppm .48871	Na5895 ppm 5.1666	Ni2316 ppm .49160	P_1782 ppm 1.0261	Pb2203 ppm .97782	S_1820 ppm .25487	Sb2068 ppm 1.0096	Se1960 ppm .98944	Si2881 ppm 4.7211
#1	14.890	1.3133	.46455	.19769	.00110	.93116	.03692	.01440	.34778	3.2824	.10644	.19347	2.3342
#2	47.688	.96002	19.051	.49239	.48872	5.1326	.49148	1.0262	.98022	.26078	1.0089	.99079	4.6431
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm 10.103	Sn1899 ppm .98745	Sr4077 ppm .48341	Th2837 ppm .00109	Ti3349 ppm .49030	TI1908 ppm 1.0073	U_3701 ppm -.04124	V_2924 ppm .50132	Zn2062 ppm .48083	Zr3391 ppm .47545			
#1	9.9363	.99000	.47829	.00161	.49077	1.0073	-.03378	.50366	.48394	.46920			
#2	10.270	.98490	.48852	.00057	.48983	1.0073	-.04870	.49897	.47771	.48169			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3099.4	Y_3600 Cts/S 54011.	Y_3774 Cts/S 6400.4										
#1	3099.8	53820.	6466.9										
#2	3099.1	54202.	6333.8										

Sample Name: CCB Acquired: 5/30/2015 19:03:13 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00020	Al1670 ppm .00032	As1890 ppm .00100	B_2089 ppm .00101	Ba4554 ppm .00018	Be3130 ppm -.00003	Bi2230 ppm -.00128	Ca3179 ppm -.00269	Cd2288 ppm -.00044	Co2286 ppm -.00007	Cr2055 ppm -.00005	Cu3247 ppm -.00074	Fe2599 ppm .00287
#1	-.00050	.00062	.00345	.00098	.00021	.00011	-.00024	-.00350	-.00039	-.00033	-.00023	-.00092	.00120
#2	.00010	.00001	-.00145	.00103	.00014	-.00016	-.00233	-.00187	-.00050	.00020	.00012	-.00055	.00455
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.00701	Li6707 ppm -.00144	Mg2790 ppm -.00379	Mn2576 ppm .00006	Mo2020 ppm .00025	Na5895 ppm .16975	Ni2316 ppm .00007	P_1782 ppm -.00132	Pb2203 ppm -.00006	S_1820 ppm .18619	Sb2068 ppm -.00262	Se1960 ppm -.00109	Si2881 ppm -.02186
#1	-.02202	-.00148	-.00578	.00006	.00066	.16645	.00025	.00016	-.00089	.18754	-.00477	-.00398	-.02376
#2	.00801	-.00139	-.00181	.00006	-.00015	.17306	-.00010	-.00279	.00078	.18484	-.00046	.00179	-.01995
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.04677	Sn1899 ppm .00160	Sr4077 ppm .00007	Th2837 ppm .00303	Ti3349 ppm .00028	TI1908 ppm -.00033	U_3701 ppm -.03380	V_2924 ppm -.00053	Zn2062 ppm -.00019	Zr3391 ppm -.00107			
#1	-.05084	.00193	.00013	.00295	.00030	-.00253	-.02098	-.00059	.00073	-.00040			
#2	-.04270	.00127	.00002	.00312	.00026	.00188	-.04662	-.00047	-.00110	-.00174			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3134.1	Y_3600 Cts/S 54521.	Y_3774 Cts/S 6380.4										
#1	3138.1	54236.	6422.7										
#2	3130.1	54806.	6338.1										

Sample Name: CCVL3301032II Acquired: 5/30/2015 19:05:36 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00934	.10720	.01555	.10651	.01013	.00091	.10275	.19575	.00509	.01050	.01092	.01424
Stddev	.00000	.00041	.00097	.00039	.00004	.00005	.00149	.00283	.00019	.00017	.00024	.00009
%RSD	.05341	.37922	6.2517	.36779	.39763	5.7648	1.4499	1.4444	3.6502	1.5793	2.2185	.62351

#1	.00934	.10692	.01487	.10679	.01010	.00095	.10170	.19775	.00522	.01062	.01075	.01430
#2	.00935	.10749	.01624	.10623	.01016	.00088	.10381	.19375	.00496	.01038	.01109	.01418

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	F .47127	2.9860	.00960	.20333	F .01381	.01971	1.1502	.04113	3.0006	.00958	.17171	.00786
Stddev	.00290	.0366	.00165	.00280	.00008	.00018	.0137	.00027	.0004	.00120	.00958	.00067
%RSD	.61618	1.2270	17.152	1.3752	.59109	.92703	1.1915	.66511	.01443	12.527	5.5773	8.5070

#1	.46922	3.0119	.01076	.20531	.01375	.01958	1.1599	.04094	3.0003	.00873	.17848	.00833
#2	.47333	2.9601	.00843	.20135	.01386	.01984	1.1405	.04133	3.0009	.01043	.16494	.00739

Check ? Value Range	Chk Fail .10000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
	30.000%				30.000%							

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01267	.45590	.97564	.10175	.01005	.01688	.01031	.01427	.05231	.01029	.02565	.01445
Stddev	.00095	.01539	.03293	.00033	.00013	.00030	.00026	.00051	.00879	.00037	.00018	.00140
%RSD	7.4883	3.3750	3.3750	.32683	1.2714	1.7754	2.4777	3.5897	16.798	3.5739	.70501	9.7101

#1	.01200	.44502	.95235	.10198	.01015	.01667	.01049	.01391	.05852	.01003	.02577	.01544
#2	.01334	.46679	.99892	.10151	.00996	.01709	.01013	.01464	.04609	.01055	.02552	.01346

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3125.4	54379.	6435.8									
Stddev	4.5	69.	14.3									
%RSD	.14546	.12642	.22268									
#1	3128.6	54330.	6445.9									
#2	3122.2	54428.	6425.6									

Sample Name: MB 280-279414/1-A Acquired: 5/30/2015 19:08:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00277	-.00590	.00219	-.00001	-.00011	-.00176	.01311	-.00007
Stddev	.00024	.00044	.00154	.00110	.00018	.00004	.00095	.00018	.00001
%RSD	77.258	15.738	26.074	50.188	1362.2	38.054	54.191	1.3593	8.4793
#1	-.00049	.00308	-.00481	.00141	-.00014	-.00008	-.00244	.01298	-.00007
#2	-.00014	.00246	-.00699	.00296	.00012	-.00013	-.00109	.01323	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	-.00009	-.00133	.02788	-.05456	-.00219	.00138	.00015	-.00008
Stddev	.00018	.00032	.00012	.00344	.03828	.00087	.00021	.00001	.00045
%RSD	342.24	351.96	9.2846	12.331	70.160	39.495	15.564	9.9141	586.82
#1	-.00007	.00013	-.00142	.03031	-.02749	-.00280	.00122	.00016	-.00039
#2	.00018	-.00031	-.00124	.02545	-.08162	-.00158	.00153	.00014	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11774	-.00002	.00344	-.00080	F .12587	-.00088	.00113	-.02512	-.05375
Stddev	.01175	.00034	.00290	.00101	.00349	.00070	.00046	.00552	.01180
%RSD	9.9787	2143.9	84.202	127.18	2.7699	79.311	41.204	21.963	21.963
#1	.12605	-.00025	.00139	-.00151	.12833	-.00137	.00080	-.02902	-.06209
#2	.10943	.00022	.00549	-.00008	.12340	-.00039	.00146	-.02122	-.04540
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00050	.00000	.00147	.00031	-.00008	.00690	.00007	.00098	-.00042
Stddev	.00115	.00000	.00046	.00001	.00167	.01542	.00030	.00026	.00112
%RSD	228.54	1241.0	31.298	3.6718	2103.6	223.42	424.73	26.476	267.86
#1	-.00132	-.00003	.00114	.00032	.00110	.01781	.00028	.00080	-.00121
#2	.00031	.00002	.00179	.00030	-.00126	-.00400	-.00014	.00116	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3169.2	55301.	6559.6						
Stddev	5.0	138.	4.6						
%RSD	.15646	.24958	.06994						
#1	3165.7	55203.	6562.8						
#2	3172.7	55398.	6556.3						

Sample Name: LCS 280-279414/2-A Acquired: 5/30/2015 19:10:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04506	1.9927	1.0130	1.0535	1.9448	.04788	2.0134	46.800	.10272
#2	.04511	1.9844	.99657	1.0497	1.9455	.04746	2.0137	46.866	.10284
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49041	.20125	.25085	.99479	48.907	.97576	48.667	.50084	1.0259
#2	.48958	.20159	.24788	.98563	49.028	.98035	48.584	.50046	1.0276
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	52.335	.48460	10.620	.49516	2.1402	.52323	2.0523	9.5434	20.423
#2	52.343	.48423	10.636	.49857	2.1565	.53204	2.0562	9.5598	20.458
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9848	.97073	1.0057	1.0070	1.9980	2.0475	.51243	.47998	.45047
#2	2.0009	.97292	1.0078	1.0061	2.0116	2.0913	.51407	.48199	.45016
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3038.2	52813.	6478.7						
#2	3049.7	52771.	6483.9						

Sample Name: 280-69778-G-2-B Acquired: 5/30/2015 19:13:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00091	8.5913	.01438	.15960	.16333	.00117	-.00075	46.134	.00067
#2	.00026	8.7505	.00494	.15862	.16645	.00103	.00327	46.977	.00104
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00548	.02243	.04727	8.1222	5.8658	.01511	3.5129	.18704	.12017
#2	.00571	.02303	.04784	8.2832	6.0525	.01733	3.5077	.18763	.12090
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	26.008	.04548	.28450	.02673	18.794	.00590	.00421	21.640	46.310
#2	27.039	.04589	.28075	.02539	18.846	.00290	.00579	22.380	47.893
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00539	.17104	.00566	.09280	-.00620	-.06840	.03314	.26510	.00382
#2	.00561	.17452	.00426	.09658	-.00617	-.07425	.03293	.26744	.00047
Check ? High Limit Low Limit	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3146.3	54558.	6732.1						
#2	3150.8	54439.	6588.0						

Sample Name: 280-69783-A-1-A Acquired: 5/30/2015 19:15:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	.09495	.00155	.37796	.00852	-.00014	.00027	42.297	.00019
Stddev	.00010	.00043	.00160	.00539	.00026	.00000	.00098	.127	.00005
%RSD	55.186	.45550	103.06	1.4270	3.0737	2.9196	363.20	.29949	25.165
#1	-.00025	.09526	.00268	.37415	.00871	-.00013	-.00042	42.387	.00022
#2	-.00011	.09465	.00042	.38177	.00834	-.00014	.00096	42.208	.00015
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.00081	.01933	.20659	3.9659	.00885	18.423	.00462	.00091
Stddev	.00012	.00025	.00025	.00405	.0936	.00080	.108	.00007	.00045
%RSD	443.78	31.409	1.3140	1.9619	2.3596	9.0468	.58422	1.5302	48.773
#1	-.00011	.00063	.01951	.20373	3.8997	.00942	18.500	.00467	.00060
#2	.00006	.00099	.01915	.20946	4.0321	.00828	18.347	.00457	.00123
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	79.422	.00327	.07137	.00427	30.558	-.00060	-.00069	1.2373	2.6478
Stddev	.976	.00014	.00073	.00123	.042	.00283	.00208	.0176	.0377
%RSD	1.2290	4.3796	1.0220	28.775	.13760	473.38	301.85	1.4229	1.4229
#1	78.731	.00317	.07085	.00340	30.588	.00140	-.00216	1.2248	2.6212
#2	80.112	.00337	.07189	.00514	30.528	-.00260	.00078	1.2497	2.6744
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00115	.19982	.00257	.00279	-.00397	.01125	.00424	.06344	-.00053
Stddev	.00004	.00027	.00161	.00021	.00095	.04903	.00071	.00015	.00144
%RSD	3.7952	.13351	62.678	7.6976	23.992	435.84	16.800	.23159	270.92
#1	.00112	.20001	.00143	.00294	-.00330	.04592	.00474	.06333	-.00155
#2	.00118	.19963	.00371	.00264	-.00465	-.02342	.00373	.06354	.00049
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3092.6	54006.	6543.3						
Stddev	.6	205.	11.1						
%RSD	.01909	.37898	.16914						
#1	3093.0	54150.	6551.1						
#2	3092.2	53861.	6535.5						

Sample Name: 280-69783-A-1-A SD@5 Acquired: 5/30/2015 19:18:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.01990	.00105	.07879	.00154	-.00004	-.00327	8.5636	-.00001
Stddev	.00056	.00003	.00254	.00004	.00009	.00007	.00245	.0778	.00024
%RSD	145.34	.16341	241.66	.04910	5.7480	166.14	75.131	.90861	1777.3
#1	-.00078	.01987	.00285	.07882	.00161	-.00010	-.00153	8.5086	.00015
#2	.00001	.01992	-.00074	.07877	.00148	.00001	-.00500	8.6186	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.00000	.00341	.04185	.77518	.00143	3.8511	.00093	-.00003
Stddev	.00039	.0001	.00009	.00119	.04172	.00014	.0280	.00004	.00046
%RSD	101.91	4981.0	2.6862	2.8422	5.3819	9.5460	.72836	3.8968	1446.0
#1	.00067	-.00006	.00334	.04101	.74568	.00133	3.8313	.00091	-.00036
#2	.00011	.00006	.00347	.04269	.80468	.00153	3.8710	.00096	.00030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.163	.00103	.01487	.00109	6.3370	-.00336	.00214	.21288	.45556
Stddev	.350	.00005	.00061	.00089	.0319	.00180	.00295	.00490	.01048
%RSD	2.1665	4.7297	4.1060	81.907	.50351	53.580	137.92	2.3009	2.3009
#1	15.915	.00106	.01531	.00172	6.3596	-.00463	.00423	.20941	.44815
#2	16.411	.00099	.01444	.00046	6.3145	-.00209	.00005	.21634	.46297
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00191	.04087	.00339	.00030	-.00071	-.01099	.00071	.01229	.00127
Stddev	.00058	.00052	.00020	.00011	.00058	.00145	.00001	.00078	.00010
%RSD	30.679	1.2606	6.0317	37.784	82.074	13.179	.76358	6.3110	7.5060
#1	.00232	.04050	.00353	.00038	-.00030	-.00996	.00071	.01284	.00134
#2	.00149	.04123	.00324	.00022	-.00112	-.01201	.00070	.01174	.00121
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3137.2	54858.	6587.9						
Stddev	9.3	388.	20.5						
%RSD	.29782	.70726	.31132						
#1	3130.6	55133.	6602.4						
#2	3143.8	54584.	6573.4						

Sample Name: 280-69783-A-1-B MS Acquired: 5/30/2015 19:20:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04414	2.0504	1.0308	1.4552	1.9570	.04730	2.0230	89.445	.10378
#2	.04499	2.0594	1.0255	1.4554	1.9551	.04763	2.0260	89.465	.10432
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49061	.20209	.26980	1.1300	53.192	.99352	66.798	.49996	1.0382
#2	.49157	.20208	.27105	1.1433	53.359	.99366	66.840	.50189	1.0418
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	129.80	.48493	10.984	.49323	34.306	.53693	2.1311	10.894	23.312
#2	130.15	.48476	11.002	.49424	34.313	.53717	2.1154	10.920	23.369
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0319	1.1776	1.0043	1.0087	2.0013	2.0552	.51686	.53128	.45086
#2	2.0408	1.1791	1.0087	1.0116	1.9959	2.0656	.51906	.53248	.45306
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3023.1	52952.	6617.3						
#2	3010.2	52520.	6612.2						

Sample Name: 280-69783-A-1-C MSD Acquired: 5/30/2015 19:23:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.04637	2.1045	2.4519	1.0605	1.5013	2.0451	.04924	2.0835	93.176
#2	.04691	2.0941	2.4073	1.0584	1.4943	2.0315	.04911	2.0827	92.752
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}
#1	.10671	.50353	.20621	.27887	1.1800	55.640	1.0369	68.576	.51140
#2	.10653	.50119	.20628	.27937	1.1742	55.223	1.0317	68.714	.51249
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 { 41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	1.0701	136.00	.49882	11.312	.50614	35.321	.55718	2.1682	11.416
#2	1.0619	134.37	.49640	11.280	.50806	35.137	.55465	2.1605	11.368
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 { 83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	24.431	2.0689	1.2296	1.0376	1.0313	2.0257	2.1356	.53016	.54162
#2	24.327	2.0790	1.2213	1.0281	1.0351	2.0422	2.1494	.52871	.54225
Check ? High Limit Low Limit	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.46861								
#2	.46503								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69783-A-1-C MSD Acquired: 5/30/2015 19:23:21 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279414 6010B dupont

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3010.5	52862.	6524.3
Stddev	9.2	59.	41.0
%RSD	.30531	.11074	.62829
#1	3004.0	52903.	6495.3
#2	3017.0	52821.	6553.3

Sample Name: 280-69783-A-1-A PDS Acquired: 5/30/2015 19:25:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279414 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04616	1.0611	.20330	.48004	.10248	.04602	.00298	58.430	.05113
Stddev	.00008	.0021	.00555	.00113	.00151	.00080	.00264	.751	.00061
%RSD	.16383	.19685	2.7315	.23587	1.4695	1.7488	88.492	1.2850	1.1924
#1	.04622	1.0625	.19937	.47924	.10142	.04545	.00485	57.899	.05156
#2	.04611	1.0596	.20722	.48084	.10355	.04659	.00112	58.961	.05070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04769	.05027	.06707	1.0915	22.587	.10664	36.182	.05189	.04958
Stddev	.00037	.00020	.00099	.0211	.181	.00215	.102	.00040	.00023
%RSD	.77305	.39845	1.4791	1.9370	.80312	2.0192	.28194	.77096	.45585
#1	.04795	.05041	.06637	1.0766	22.459	.10512	36.109	.05161	.04942
#2	.04743	.05013	.06777	1.1065	22.715	.10817	36.254	.05218	.04974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.384	.05100	W 2.1782	.10062	30.488	.10184	.20103	5.7818	12.373
Stddev	2.555	.00008	.0126	.00163	.107	.00103	.00407	.1454	.311
%RSD	2.6504	.16001	.57949	1.6215	.35070	1.0072	2.0224	2.5143	2.5143
#1	94.578	.05106	2.1871	.10177	30.563	.10257	.20390	5.6790	12.153
#2	98.190	.05094	2.1693	.09947	30.412	.10112	.19815	5.8846	12.593
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09990	.24017	.19308	.05073	.19140	.48030	.05374	.25324	.04255
Stddev	.00080	.00207	.00049	.00041	.00085	.01775	.00003	.00045	.00096
%RSD	.79750	.86314	.25231	.80740	.44512	3.6965	.04764	.17573	2.2630
#1	.09934	.23870	.19274	.05044	.19200	.49285	.05372	.25356	.04187
#2	.10047	.24163	.19343	.05102	.19080	.46774	.05375	.25293	.04323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3056.7	53598.	6618.4						
Stddev	3.7	168.	77.5						
%RSD	.12162	.31285	1.1716						
#1	3059.3	53717.	6673.2						
#2	3054.1	53480.	6563.6						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 19:28:17 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00814	Al3092 ppm 48.591	As1890 ppm .00284	B_2089 ppm .00425	Ba4554 ppm .00075	Be3130 ppm .00002	Bi2230 ppm 1.0189	Ca3179 ppm .03542	Cd2288 ppm -.00032	Co2286 ppm -.00027	Cr2055 ppm .00084
#1	-.00806	48.635	.00364	.00415	.00076	-.00002	1.0162	.03983	-.00035	-.00026	.00074
#2	-.00822	48.548	.00203	.00434	.00073	.00005	1.0215	.03101	-.00029	-.00028	.00094
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00033	Fe2714 ppm 48.407	K_7664 ppm .02369	Li6707 ppm -.00020	Mg2790 ppm .04485	Mn2576 ppm -.00155	Mo2020 ppm -.00056	Na8183 ppm 246.34	Ni2316 ppm .00179	P_1782 ppm .00711	Pb2203 ppm .00128
#1	-.00057	48.389	.01577	-.00045	.04690	-.00158	-.00046	246.22	.00180	.00579	.00074
#2	-.00009	48.425	.03160	.00005	.04280	-.00152	-.00065	246.47	.00179	.00844	.00183
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0299	Sb2068 ppm -.01176	Se1960 ppm .00862	Si2881 ppm -.04470	SiO2 ppm -.09567	Sn1899 ppm -.00204	Sr4077 ppm .00040	Th2837 ppm 4.9540	Ti3349 ppm -.01239	TI1908 ppm .00097	U_3701 ppm W 10.508
#1	5.0065	-.01254	.00645	-.05759	-.12325	-.00337	.00037	5.0024	-.01240	-.00036	10.520
#2	5.0533	-.01098	.01079	-.03181	-.06808	-.00070	.00044	4.9056	-.01238	.00230	10.496
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00257	Zn2062 ppm .00049	Zr3391 ppm -.12741								
#1	.00259	.00055	-.12968								
#2	.00254	.00043	-.12514								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3067.9	Y_3600 Cts/S 53255.	Y_3774 Cts/S 6586.9								
#1	3073.1	53110.	6563.6								
#2	3062.7	53400.	6610.1								

Sample Name: CCV-3296664 Acquired: 5/30/2015 19:30:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48460	.52934	.99874	.51910	.48355	.47407	.00102	.47927	.50550	.49962	.51564	.48897	2.3893
Stddev	.00320	.00166	.00665	.00013	.00571	.00619	.00028	.0794	.00103	.00144	.00112	.00232	.0301
%RSD	.66059	.31301	.66558	.02487	1.1817	1.3064	27.288	1.6557	.20317	.28772	.21646	.47544	1.2608
#1	.48687	.53051	1.0034	.51919	.47951	.46969	.00083	4.7366	.50622	.50064	.51486	.49061	2.3680
#2	.48234	.52817	.99404	.51901	.48759	.47845	.00122	4.8489	.50477	.49860	.51643	.48733	2.4106
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.254	.97249	19.201	.49107	.48999	5.0666	.49344	1.0267	.98174	.04635	1.0097	.99595	4.6809
Stddev	.707	.01183	.123	.00089	.00028	.0726	.00049	.0018	.00259	.00368	.0011	.00785	.0586
%RSD	1.4659	1.2169	.64220	.18064	.05736	1.4336	.09865	.17793	.26358	7.9346	.10647	.78867	1.2528
#1	47.753	.96412	19.288	.49170	.48979	5.0152	.49378	1.0280	.97991	.04895	1.0105	.99040	4.6395
#2	48.754	.98086	19.113	.49044	.49019	5.1180	.49309	1.0254	.98357	.04375	1.0089	1.0015	4.7224
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.017	.99067	.48344	-.00029	.49113	1.0143	-.00375	.50015	.47708	.47473			
Stddev	.126	.00290	.00653	.00137	.00074	.0019	.02195	.00382	.01013	.00362			
%RSD	1.2528	.29227	1.3516	468.37	.14998	.18491	585.55	.76334	2.1242	.76288			
#1	9.9285	.98862	.47882	.00068	.49166	1.0130	-.01927	.50285	.48425	.47217			
#2	10.106	.99272	.48806	-.00126	.49061	1.0157	.01177	.49745	.46992	.47729			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass		
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3110.0	54163.	6480.1										
Stddev	4.4	43.	90.5										
%RSD	.14169	.07866	1.3972										
#1	3106.9	54193.	6544.1										
#2	3113.1	54132.	6416.1										

Sample Name: CCB Acquired: 5/30/2015 19:33:28 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00043	Al1670 ppm .00018	As1890 ppm -.00334	B_2089 ppm .00207	Ba4554 ppm -.00003	Be3130 ppm -.00001	Bi2230 ppm -.00059	Ca3179 ppm -.00033	Cd2288 ppm -.00021	Co2286 ppm -.00005	Cr2055 ppm .00021	Cu3247 ppm -.00072	Fe2599 ppm -.00106
#1	-.00035	-.00002	-.00205	.00220	.00000	.00001	-.00093	-.00141	-.00040	.00003	.00026	-.00066	.00078
#2	-.00050	.00038	-.00463	.00194	-.00006	-.00002	-.00026	.00075	-.00001	-.00012	.00016	-.00079	-.00289
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .00504	Li6707 ppm -.00170	Mg2790 ppm -.00132	Mn2576 ppm -.00004	Mo2020 ppm .00020	Na5895 ppm .07879	Ni2316 ppm .00018	P_1782 ppm .00164	Pb2203 ppm -.00241	S_1820 ppm .04423	Sb2068 ppm -.00223	Se1960 ppm .00391	Si2881 ppm -.01186
#1	137.01	80.232	43.983	136.17	148.64	5.1138	35.543	99.743	17.642	2.7695	7.8699	66.455	163.04
#2	.00993	-.00074	-.00173	.00000	-.00001	.08164	.00022	.00048	-.00211	.04336	-.00236	.00207	.00181
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.02538	Sn1899 ppm -.00010	Sr4077 ppm -.00003	Th2837 ppm .00100	Ti3349 ppm .00061	TI1908 ppm .00079	U_3701 ppm -.02526	V_2924 ppm -.00054	Zn2062 ppm -.00018	Zr3391 ppm -.00044			
#1	163.04	1267.9	27.924	35.421	37.326	200.60	20.424	9.3093	110.14	161.50			
#2	.00388	-.00098	-.00002	.00075	.00077	-.00033	-.02161	-.00058	-.00004	-.00094			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass			
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3157.8	Y_3600 Cts/S 55476.	Y_3774 Cts/S 6469.1										
#1	3160.1	55759.	6513.2										
#2	3155.5	55193.	6425.1										

Sample Name: CCVL3301032II Acquired: 5/30/2015 19:35:51 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00973	.10739	.01182	.10735	.00964	.00089	.10420	.19858	.00516	.01047	.01103	.01465	.09581	.29803
Stddev	.00006	.00091	.00102	.00096	.00010	.00003	.00268	.00357	.00014	.00013	.00001	.00083	.00060	.0062
%RSD	.63860	.84294	8.6734	.89313	1.0542	3.4534	2.5674	1.8000	2.7283	1.2312	.10916	5.6620	.62471	.20758
#1	.00968	.10675	.01254	.10667	.00971	.00092	.10231	.20111	.00506	.01038	.01104	.01524	.09538	2.9847
#2	.00977	.10803	.01109	.10803	.00957	.00087	.10609	.19605	.00525	.01056	.01103	.01407	.09623	2.9759

Check ? Chk Pass Chk Pass

Value Range

Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00933	.20757	.01049	.02002	1.1025	.04159	3.0662	.00919	.04407	.00862	.01703	.43644	.93399	.10347
Stddev	.00033	.00648	.00026	.00034	.0092	.00025	.0096	.00080	.00401	.00087	.00027	.00838	.01793	.00109
%RSD	3.4874	3.1239	2.5174	1.6816	.83377	.59660	.31335	8.7248	9.0912	10.045	1.5807	1.9196	1.9196	1.0536
#1	.00956	.21216	.01068	.02025	1.0960	.04176	3.0730	.00862	.04691	.00923	.01722	.43052	.92131	.10424
#2	.00910	.20299	.01031	.01978	1.1090	.04141	3.0594	.00975	.04124	.00801	.01684	.44237	.94667	.10270

Check ? Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass

Value Range

Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01006	.01668	.01042	.01604	.05666	.01083	.02176	.01532
Stddev	.00003	.00158	.00008	.00145	.03576	.00014	.00022	.00121
%RSD	.28674	9.4524	.76351	9.0342	63.109	1.2874	1.0084	7.9060
#1	.01004	.01780	.01048	.01501	.03138	.01093	.02161	.01617
#2	.01008	.01557	.01037	.01706	.08194	.01073	.02192	.01446

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass

Value Range

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3132.7	54190.	6523.0
Stddev	2.6	920.	25.6
%RSD	.08276	1.6968	.39279
#1	3134.6	53540.	6504.9
#2	3130.9	54841.	6541.2

Sample Name: MB 280-279417/1-A Acquired: 5/30/2015 19:38:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00043	As1890 ppm .00263	B_2089 ppm .00013	Ba4554 ppm .00234	Be3130 ppm .00013	Bi2230 ppm .00002	Ca3179 ppm .01072	Cd2288 ppm -.00024
#1	-.00015	.00246	-.00152	.00284	-.00005	-.00002	.00243	.00768	-.00036
#2	-.00071	.00279	.00126	.00184	-.00022	.00005	-.00192	.01375	-.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00010	Cu3247 ppm -.00010	Fe2599 ppm -.00086	K_7664 ppm .00746	Li6707 ppm -.00828	Mg2790 ppm -.00124	Mn2576 ppm .00253	Mo2020 ppm .00011
#1	.00027	-.00023	-.00113	.01011	-.00372	-.00127	.00275	.00013	.00014
#2	-.00007	.00004	-.00059	.00482	-.01284	-.00120	.00231	.00010	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .06570	P_1782 ppm -.00080	Pb2203 ppm .00315	S_1820 ppm -.00004	Sb2068 ppm .04028	Se1960 ppm -.00158	Si2881 ppm .00356	SiO2 ppm -.02285
#1	.05914	-.00089	.00223	-.00073	.03791	-.00079	.00132	-.02198	-.04703
#2	.07226	-.00071	.00407	.00065	.04265	-.00237	.00579	-.02372	-.05075
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00078	Th2837 ppm .00003	Ti3349 ppm .00164	Tl1908 ppm .00026	U_3701 ppm .00046	V_2924 ppm -.00880	Zn2062 ppm .00048	Zr3391 ppm .00131
#1	.00137	.00005	.00196	.00020	-.00192	-.02283	.00013	.00140	-.00156
#2	.00019	.00000	.00132	.00032	.00285	.00523	.00083	.00122	.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3166.8	Y_3774 Cts/S 55149.	377.433 {89}					
#1	3162.4	54997.	6567.6						
#2	3171.2	55302.	6616.8						

Sample Name: LCS 280-279417/2-A Acquired: 5/30/2015 19:40:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04568	As1890 ppm 2.0278	B_2089 ppm 1.0278	Ba4554 ppm 1.0860	Be3130 ppm 1.9832	Bi2230 ppm .04822	Ca3179 ppm 2.0771	Cd2288 ppm 47.573
#1	.04532	2.0275	1.0245	1.0842	1.9798	.04818	2.0783	47.482	.10575
#2	.04604	2.0281	1.0311	1.0878	1.9866	.04826	2.0759	47.663	.10673
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .50436	Cu3247 ppm F .20588	Fe2599 ppm .25703	K_7664 ppm .95482	Li6707 ppm 49.687	Mg2790 ppm .99361	Mn2576 ppm 49.324	Mo2020 ppm .50905
#1	.50470	.20594	.25626	.94810	49.604	.99153	49.311	.50873	1.0568
#2	.50402	.20582	.25780	.96153	49.769	.99569	49.338	.50937	1.0555
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 53.511	P_1782 ppm .49712	Pb2203 ppm 10.905	S_1820 ppm .51035	Sb2068 ppm 2.1612	Se1960 ppm W .54958	Si2881 ppm 2.1617	SiO2 ppm 9.7007
#1	53.522	.49709	10.902	.50966	2.1518	.55165	2.1564	9.6456	20.642
#2	53.499	.49715	10.909	.51104	2.1705	.54752	2.1671	9.7559	20.878
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn .54000 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.0916	Th2837 ppm .98932	Ti3349 ppm 1.0231	Tl1908 ppm 1.0265	U_3701 ppm 2.1048	V_2924 ppm .52108	Zn2062 ppm .48473	Zr3391 ppm .45824
#1	2.0874	.98864	1.0207	1.0246	2.0953	2.1375	.52012	.48580	.45543
#2	2.0957	.99000	1.0254	1.0284	2.1144	2.1555	.52203	.48365	.46104
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3029.3	Y_3774 Cts/S 52830.	377.433 {89}					
#1	3030.2	52798.	6519.8						
#2	3028.4	52863.	6479.5						

Sample Name: 280-69701-A-1-B Acquired: 5/30/2015 19:43:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00021	As1890 ppm .06224	B_2089 ppm .00882	Ba4554 ppm .02295	Be3130 ppm .00024	Bi2230 ppm .00177	Ca3179 ppm 210.46	Cd2288 ppm -.00014
#1	-.00006	.06187	.00891	.08277	.02320	-.00023	.00228	210.86	-.00022
#2	-.00036	.06261	.00873	.08279	.02271	-.00024	.00127	210.05	-.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00006	Cu3247 ppm .00092	Fe2599 ppm .00162	K_7664 ppm .06137	Li6707 ppm 10.262	Mg2790 ppm .02857	Mn2576 ppm .42.190	Mo2020 ppm .05206
#1	.00027	.00099	.00156	.05994	10.204	.02810	42.298	.05173	.06069
#2	-.00015	.00086	.00167	.06280	10.319	.02904	42.082	.05239	.05947
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .87.136	P_1782 ppm .00382	Pb2203 ppm .03611	S_1820 ppm .00541	Sb2068 ppm 177.36	Se1960 ppm .00149	Si2881 ppm .01218	SiO2 ppm 6.3540
#1	86.480	.00415	.03577	.00474	177.36	.00018	.01132	6.3070	13.497
#2	87.792	.00349	.03646	.00607	177.36	.00280	.01305	6.4009	13.698
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00028	Th2837 ppm 2.1070	Ti3349 ppm .00302	Tl1908 ppm .00145	U_3701 ppm -.00897	V_2924 ppm .57895	Zn2062 ppm .25830	Zr3391 ppm .00038
#1	.00009	2.1087	.00203	.00120	-.00889	.59255	.26077	.00071	-.00069
#2	.00047	2.1053	.00400	.00170	-.00906	.56535	.25583	.00004	.00267
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3022.7	Y_3774 Cts/S 53211.	377.433 {89}					
#1	3026.2	52969.	6527.0						
#2	3019.3	53453.	6593.7						

Sample Name: 280-69701-A-1-B SD@5 Acquired: 5/30/2015 19:45:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00004	.01331	-.00237	.01718	.00469	.00007	.00075	42.555	-.00018
#2	-.00014	.01392	.00661	.01647	.00471	-.00008	-.00090	43.026	-.00026
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00025	.00057	-.00029	.01296	1.9872	.00446	8.6945	.01076	.01108
#2	.00053	.00029	-.00008	.00987	1.9649	.00422	8.6991	.01071	.01082
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	17.899	.00287	.00970	.00159	34.377	-.00280	-.00001	1.2349	2.6428
#2	18.014	.00258	.00710	.00193	34.500	-.00271	.00549	1.2512	2.6777
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00160	.42144	.00111	.00001	-.00606	.11940	.05136	-.00034	.00030
#2	.00149	.42505	.00176	.00054	-.00350	.12984	.05155	.00068	-.00052
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3083.6	54389.	6559.8						
#2	3072.4	54068.	6507.8						

Sample Name: 280-69701-A-1-C MS Acquired: 5/30/2015 19:48:34 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04439	1.9835	W 2.3889	1.0304	1.1270	1.9259	.04546	F 1.9958	252.66
Stddev	.00053	.0008	.0076	.0045	.0010	.0100	.00027	.0035	2.25
%RSD	1.1903	.04148	.31987	.43253	.08505	.52019	.59701	.17662	.88966
#1	.04477	1.9841	2.3835	1.0336	1.1277	1.9329	.04565	1.9933	254.25
#2	.04402	1.9829	2.3943	1.0273	1.1263	1.9188	.04527	1.9983	251.07
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10265	.47381	W .18710	.24642	.97592	58.697	1.0022	88.314	.53436
Stddev	.00021	.00104	.00028	.00098	.00489	.345	.0042	.546	.00077
%RSD	.20645	.21996	.15005	.39930	.50157	.58708	.42097	.61836	.14399
#1	.10250	.47454	.18729	.24572	.97938	58.940	1.0052	87.928	.53382
#2	.10280	.47307	.18690	.24712	.97245	58.453	.99925	88.701	.53491
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0763	133.34	.46897	W 10.925	.47544	179.41	.53369	2.0997	15.728
Stddev	.0004	.65	.00126	.008	.00059	.32	.00190	.0099	.132
%RSD	.04192	.48728	.26942	.07623	.12358	.17837	.35694	.47195	.84101
#1	1.0759	133.80	.46987	10.919	.47585	179.64	.53234	2.1067	15.634
#2	1.0766	132.88	.46808	10.931	.47502	179.19	.53503	2.0927	15.821
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.657	1.9750	3.0259	.98365	.98706	1.8903	2.6134	.75291	.45304
Stddev	.283	.0131	.0155	.00210	.00085	.0119	.0598	.00105	.00482
%RSD	.84101	.66425	.51080	.21309	.08641	.62740	2.2898	.13940	1.0641
#1	33.457	1.9843	3.0368	.98514	.98645	1.8986	2.5711	.75365	.44963
#2	33.858	1.9657	3.0150	.98217	.98766	1.8819	2.6557	.75217	.45645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.43537								
Stddev	.00157								
%RSD	.36116								
#1	.43648								
#2	.43426								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69701-A-1-C MS Acquired: 5/30/2015 19:48:34 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279417 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2876.3	50563.	6282.8
Stddev	1.6	255.	97.4
%RSD	.05699	.50384	1.5498
#1	2877.5	50743.	6213.9
#2	2875.1	50383.	6351.6

Sample Name: 280-69701-A-1-D MSD Acquired: 5/30/2015 19:50:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04444	1.9946	W 2.4491	1.0399	1.1461	1.9768	.04646	F 2.0241	263.74
Stddev	.00077	.0003	.0478	.0009	.0044	.0073	.00010	.0109	2.29
%RSD	1.7395	.01694	1.9536	.08254	.38571	.37049	.21629	.53979	.86755
#1	.04498	1.9944	2.4152	1.0405	1.1492	1.9716	.04638	2.0319	262.13
#2	.04389	1.9949	2.4829	1.0393	1.1430	1.9819	.04653	2.0164	265.36
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10375	.47999	W .19070	.24907	.98586	60.123	1.0286	89.661	.53830
Stddev	.00020	.00010	.00020	.00109	.00080	.196	.0069	.407	.00282
%RSD	.19468	.02010	.10275	.43676	.08150	.32603	.67198	.45428	.52392
#1	.10390	.47993	.19084	.24984	.98530	59.985	1.0237	89.949	.54029
#2	.10361	.48006	.19057	.24830	.98643	60.262	1.0334	89.373	.53631
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0964	138.86	.47474	W 11.074	.47761	W 186.80	.54292	2.1279	16.294
Stddev	.0012	.03	.00035	.011	.00177	.39	.00163	.0030	.115
%RSD	.11095	.02241	.07295	.10087	.36962	.21015	.30061	.14273	.70334
#1	1.0956	138.84	.47449	11.082	.47886	187.08	.54407	2.1301	16.213
#2	1.0973	138.88	.47498	11.066	.47637	186.52	.54177	2.1258	16.375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.870	1.9988	3.1599	.99522	.99593	1.9097	2.6754	.76318	.45402
Stddev	.245	.0036	.0088	.00465	.00179	.0083	.0403	.00545	.00267
%RSD	.70334	.17916	.27676	.46702	.17989	.43362	1.5060	.71371	.58847
#1	34.697	2.0013	3.1537	.99850	.99719	1.9156	2.7039	.76704	.45591
#2	35.044	1.9963	3.1660	.99193	.99466	1.9039	2.6469	.75933	.45213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45195								
Stddev	.00154								
%RSD	.34020								
#1	.45086								
#2	.45303								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69701-A-1-D MSD Acquired: 5/30/2015 19:50:58 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279417 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2891.2	51196.	6482.8
Stddev	3.7	270.	9.6
%RSD	.12814	.52741	.14793
#1	2893.8	51005.	6489.5
#2	2888.6	51387.	6476.0

Sample Name: 280-69701-A-2-D Acquired: 5/30/2015 19:53:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00017	As1890 ppm .00945	B_2089 ppm .00283	Ba4554 ppm .08025	Be3130 ppm .03676	Bi2230 ppm -.00006	Ca3179 ppm .00260	Cd2288 ppm 235.12	
#1	-.00008	.00928	.00739	.08023	.03666	-.00008	.00354	234.49	-.00022	
#2	-.00026	.00961	-.00172	.08027	.03686	-.00004	.00166	235.75	-.00010	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00080	Cu3247 ppm .00127	Fe2599 ppm .00070	K_7664 ppm .22486	Li6707 ppm 4.2521	Mg2790 ppm .00942	Mn2576 ppm 52.146	Mo2020 ppm .28849	
#1	.00089	.00114	.00080	.22831	4.2756	.00870	52.094	.28805	.07404	
#2	.00071	.00139	.00059	.22141	4.2287	.01014	52.199	.28893	.07469	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 181.85	P_1782 ppm .00920	Pb2203 ppm .02348	S_1820 ppm .00394	Sb2068 ppm F 288.52	Se1960 ppm .00638	Si2881 ppm .00829	SiO2 ppm 7.8718	
#1	181.37	.00915	.02008	.00434	287.08	.00609	.00607	7.9605	17.035	
#2	182.33	.00924	.02688	.00355	289.96	.00666	.01052	7.7830	16.656	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00032	Th2837 ppm 1.8104	Ti3349 ppm .00039	Tl1908 ppm .00049	U_3701 ppm -.00991	V_2924 ppm .66340	Zn2062 ppm .00062	Zr3391 ppm .00357	
#1	.00122	1.8051	-.00044	.00028	-.01016	.68543	.00084	.00358	.00221	
#2	-.00058	1.8158	.00122	.00070	-.00966	.64136	.00040	.00356	-.00055	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2900.7	Y_3774 Cts/S 50712.	377.433 {89}						
#1	2902.7	50951.	6512.9							
#2	2898.8	50474.	6497.0							

Sample Name: 280-69701-A-3-B Acquired: 5/30/2015 19:56:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.38673	-.00202	.07478	.03119	-.00009	-.00017	201.53	-.00009
Stddev	.00009	.00214	.00060	.00020	.00044	.00004	.00122	.17	.00001
%RSD	18.104	.55239	29.510	.26189	1.4090	41.688	726.47	.08552	14.199
#1	-.00043	.38522	-.00160	.07464	.03088	-.00007	.00069	201.40	-.00008
#2	-.00055	.38824	-.00245	.07491	.03150	-.00012	-.00103	201.65	-.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00111	.00093	.27987	4.6214	.01982	41.127	.01116	.10674
Stddev	.00026	.00010	.00070	.00490	.0507	.00055	.087	.00020	.00052
%RSD	130.45	8.5984	75.338	1.7502	1.0978	2.7720	.21062	1.7761	.48822
#1	-.00002	.00104	.00143	.27640	4.5855	.02021	41.066	.01130	.10637
#2	-.00038	.00118	.00044	.28333	4.6572	.01943	41.188	.01102	.10711
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	82.579	.00404	.02832	.00498	165.36	.00159	.00281	6.6685	14.271
Stddev	2.122	.00004	.00527	.00024	.55	.00005	.00208	.1386	.297
%RSD	2.5694	.88697	18.603	4.8358	.33081	2.8399	73.933	2.0784	2.0784
#1	81.079	.00406	.02459	.00515	164.97	.00162	.00134	6.5705	14.061
#2	84.080	.00401	.03205	.00481	165.75	.00155	.00428	6.7665	14.480
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	2.0232	.00123	.00802	-.00789	.29216	.03041	.00455	.00041
Stddev	.00005	.0054	.00092	.00004	.00057	.02960	.00032	.00046	.00130
%RSD	11.521	.26849	75.271	.45963	7.2212	10.131	1.0676	10.034	318.11
#1	.00040	2.0194	.00188	.00805	-.00829	.27123	.03064	.00487	-.00051
#2	.00047	2.0270	.00057	.00799	-.00749	.31309	.03018	.00422	.00133
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2907.6	51084.	6187.6						
Stddev	11.7	189.	50.5						
%RSD	.40289	.36906	.81583						
#1	2915.8	51217.	6151.9						
#2	2899.3	50951.	6223.3						

Sample Name: 280-69701-A-4-B Acquired: 5/30/2015 19:58:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00037	As1890 ppm .14293	B_2089 ppm .00082	Ba4554 ppm .06010	Be3130 ppm .01726	Bi2230 ppm -.00001	Ca3179 ppm .00517	Cd2288 ppm 191.74
#1	-.00013	.14395	-.00371	.05972	.01708	.00001	.00634	191.92	.00016
#2	-.00060	.14191	.00536	.06047	.01743	-.00004	.00401	191.55	-.00024
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00019	Cu3247 ppm .00098	Fe2599 ppm .00162	K_7664 ppm .13151	Li6707 ppm 5.6382	Mg2790 ppm .03138	Mn2576 ppm 45.765	Mo2020 ppm .00445
#1	-.00021	.00078	.00164	.13143	5.6340	.03193	45.950	.00444	.26470
#2	-.00017	.00118	.00160	.13158	5.6424	.03082	45.581	.00447	.26269
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 93.117	P_1782 ppm .00414	Pb2203 ppm .01118	S_1820 ppm .00312	Sb2068 ppm 173.29	Se1960 ppm .00337	Si2881 ppm .01976	SiO2 ppm 5.7803
#1	93.263	.00439	.01185	.00277	173.90	.00441	.02395	5.7956	12.403
#2	92.970	.00388	.01050	.00347	172.67	.00234	.01557	5.7650	12.337
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00241	Th2837 ppm 1.9705	Ti3349 ppm -.00021	Tl1908 ppm .00384	U_3701 ppm -.00844	V_2924 ppm .90900	Zn2062 ppm .00479	Zr3391 ppm .00166
#1	.00187	1.9733	-.00037	.00363	-.00880	.90441	.00485	.00126	.00059
#2	.00295	1.9676	-.00004	.00406	-.00807	.91360	.00472	.00205	.00081
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2916.0	Y_3774 Cts/S 50750.	360.073 {94}	377.433 {89}				
#1	2889.6	50683.	6373.6						
#2	2942.4	50817.	6366.8						

Sample Name: 280-69701-A-5-B Acquired: 5/30/2015 20:01:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00048	As1890 ppm .01130	B_2089 ppm .00289	Ba4554 ppm .10296	Be3130 ppm .02548	Bi2230 ppm .00013	Ca3179 ppm 270.84	Cd2288 ppm -.00038
#1	-.00025	.01126	.00060	.10337	.02601	-.00026	-.00045	272.78	-.00031
#2	-.00072	.01134	-.00638	.10255	.02494	.00000	.00001	268.90	-.00044
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00053	Cu3247 ppm .00125	Fe2599 ppm .00061	K_7664 ppm .06873	Li6707 ppm 2.9370	Mg2790 ppm .06831	Mn2576 ppm 73.487	Mo2020 ppm .03979
#1	-.00051	.00150	.00089	.06865	2.9537	.06893	73.500	.04006	.04020
#2	-.00055	.00099	.00033	.06881	2.9204	.06769	73.474	.03952	.04153
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 418.47	P_1782 ppm .00875	Pb2203 ppm .02556	S_1820 ppm .00489	Sb2068 ppm F 487.17	Se1960 ppm .00253	Si2881 ppm .00820	SiO2 ppm 6.7078
#1	423.64	.00888	.02569	.00359	485.45	.00206	.00837	6.7691	14.486
#2	413.31	.00861	.02542	.00619	488.89	.00301	.00803	6.6465	14.223
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00022	Th2837 ppm 3.6940	Ti3349 ppm .00103	Tl1908 ppm .00034	U_3701 ppm -.00798	V_2924 ppm .24308	Zn2062 ppm -.00111	Zr3391 ppm .00372
#1	-.00066	3.7392	-.00013	.00038	-.00746	.26788	-.00044	.00345	.00047
#2	.00021	3.6488	.00220	.00031	-.00851	.21828	-.00178	.00400	-.00077
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2824.4	Y_3774 Cts/S 16.3	360.073 {94}	377.433 {89}				
#1	2835.9	49639.	6364.5						
#2	2812.9	49809.	6464.9						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 20:04:11 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00721 .00090 12.421	Al3092 ppm 48.825 .233 .47780	As1890 ppm .00283 .00169 59.777	B_2089 ppm .00191 .00029 15.273	Ba4554 ppm .00046 .00032 69.331	Be3130 ppm .00007 .00004 47.547	Bi2230 ppm 1.0263 .0014 .13948	Ca3179 ppm .05711 .00832 14.576	Cd2288 ppm -.00039 .00008 20.003	Co2286 ppm -.00057 .00016 28.230	Cr2055 ppm .00054 .00011 20.057	Cu3247 ppm -.00060 .00014 22.954	Fe2714 ppm 48.408 .028 .05874
#1	-.00784	48.990	.00403	.00212	.00023	.00005	1.0253	.06300	-.00044	-.00046	.00061	-.00070	48.388
#2	-.00657	48.660	.00163	.00170	.00068	.00010	1.0273	.05122	-.00033	-.00069	.00046	-.00050	48.428
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .05615 .01977 35.208	Li6707 ppm .00003 .00074 2197.3	Mg2790 ppm .05172 .00356 6.8752	Mn2576 ppm -.00138 .00006 4.4318	Mo2020 ppm -.00052 .00032 60.774	Na8183 ppm 246.83 .33 .13256	Ni2316 ppm .00175 .00061 34.610	P_1782 ppm .00920 .00060 6.4931	Pb2203 ppm .00167 .00113 68.017	S_1820 ppm 5.0722 .0042 .08254	Sb2068 ppm -.01033 .00323 31.231	Se1960 ppm .00885 .00287 32.380	Si2881 ppm -.04691 .00100 2.1273
#1	.04217	-.00049	.04921	-.00143	-.00075	247.06	.00218	.00878	.00086	5.0752	-.00805	.00682	-.04761
#2	.07013	.00056	.05424	-.00134	-.00030	246.60	.00132	.00962	.00247	5.0693	-.01261	.01088	-.04620
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units Avg Stddev %RSD	SiO2 ppm -.10038 .00214 2.1273	Sn1899 ppm -.00104 .00097 93.106	Sr4077 ppm .00064 .00011 17.388	Th2837 ppm 4.9081 .0138 .28034	Ti3349 ppm -.01255 .00049 3.8808	TI1908 ppm .00027 .00034 126.09	U_3701 ppm 10.420 .183 1.7545	V_2924 ppm .00287 .00056 19.496	Zn2062 ppm .00000 .0002 59411.	Zr3391 ppm -.12776 .00280 2.1917			
#1	-.10189	-.00035	.00072	4.8984	-.01289	.00003	10.290	.00247	.00017	-.12578			
#2	-.09887	-.00172	.00056	4.9178	-.01220	.00051	10.549	.00326	-.00017	-.12974			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3068.0	Y_3600 Cts/S 53893.	Y_3774 Cts/S 6516.5										
#1	3074.8	53853.	6410.2										
#2	3061.2	53934.	6622.7										

Sample Name: CCV-3296664 Acquired: 5/30/2015 20:06:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48978	.53708	1.0047	.52447	.48361	.47355	-.00019	4.7611	.51599	.50381	.52055	.49688	2.3966
Stddev	.00251	.00172	.0063	.00227	.00326	.00266	.00117	.0185	.00054	.00348	.00263	.00256	.0109
%RSD	.51259	.31987	.62408	.43244	.67332	.56193	602.76	.38907	.10550	.68984	.50619	.51444	.45440
#1	.49156	.53587	1.0002	.52287	.48130	.47167	.00063	4.7480	.51638	.50136	.51869	.49869	2.3889
#2	.48801	.53830	1.0091	.52608	.48591	.47543	-.00102	4.7742	.51561	.50627	.52242	.49508	2.4043

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.154	.97435	19.243	.49853	.49647	5.1010	.49727	1.0441	.98695	.04230	1.0269	1.0112	4.6457
Stddev	.285	.00800	.049	.00120	.00278	.0497	.00074	.0093	.00426	.00017	.0071	.0082	.0461
%RSD	.59123	.82084	.25405	.23989	.56089	.97406	.14814	.88966	.43164	.40749	.69396	.81221	.99219
#1	47.953	.96869	19.278	.49769	.49450	5.0659	.49675	1.0376	.98394	.04242	1.0219	1.0054	4.6131
#2	48.355	.98000	19.209	.49938	.49844	5.1362	.49779	1.0507	.98996	.04218	1.0319	1.0170	4.6783

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	9.9418	.99806	.48388	.00116	.49678	1.0191	-.01687	.50820	.48041	.47102
Stddev	.0986	.00144	.00342	.00064	.00132	.0003	.02122	.00547	.00066	.00112
%RSD	.99219	.14469	.70722	55.051	.26544	.03008	125.81	.10759	.13804	.23818
#1	9.8720	.99909	.48147	.00071	.49584	1.0194	-.00186	.50433	.47994	.47023
#2	10.012	.99704	.48630	.00161	.49771	1.0189	-.03188	.51206	.48088	.47182

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Chk Pass							
Avg	3103.9	54601.	6628.5								
Stddev	2.5	313.	16.7								
%RSD	.08092	.57311	.25137								
#1	3105.7	54823.	6616.7								
#2	3102.1	54380.	6640.3								

Sample Name: CCB Acquired: 5/30/2015 20:09:20 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	-0.00007	.00161	-0.0121	.00192	-0.00002	-0.00001	-0.00064	.00521	-0.00024	.00025	-0.00002	-0.00116
Stddev	.00016	.00039	.00218	.00063	.00009	.00008	.00387	.00036	.00017	.00013	.00003	.00005
%RSD	227.01	24.280	180.47	33.057	398.66	610.35	602.47	6.9240	70.207	53.422	192.75	4.3719

#1	.00004	.00189	.00033	.00237	-0.00008	.00004	-0.00338	.00547	-0.00036	.00035	-0.00004	-.00120
#2	-.00019	.00133	-.00275	.00147	.00004	-.00007	.00210	.00495	-.00012	.00016	.00001	-.00113

Check ? High Limit Low Limit	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	F .10592	.00490	-.00130	-.00040	.00095	.00026	.14773	.00010	.00235	.00087	.03187	-.00066
Stddev	.00074	.00787	.00022	.00258	.00001	.00028	.00263	.00023	.00072	.00062	.00230	.00060
%RSD	.69409	160.56	17.308	640.70	1.0377	108.89	1.7798	221.32	30.777	71.696	7.2143	92.181
#1	.10540	-.00066	-.00114	.00142	.00096	.00006	.14587	-.00006	.00184	.00131	.03025	-.00108
#2	.10644	.01047	-.00146	-.00223	.00094	.00046	.14959	.00027	.00286	.00043	.03350	-.00023

Check ? High Limit Low Limit	Chk Fail .10000 -.10000	Chk Pass										
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00177	-.02219	-.04748	-.00052	.00008	.00265	.00024	.00065	-.01211	-.00007	.00011	.00053
Stddev	.00457	.00389	.00832	.00038	.00002	.00070	.00007	.00205	.00483	.00005	.00039	.00068
%RSD	257.69	17.514	17.514	74.321	27.971	26.273	29.172	316.40	39.883	72.575	374.88	127.37
#1	.00500	-.01944	-.04160	-.00025	.00006	.00216	.00029	.00210	-.00869	-.00011	.00038	.00102
#2	-.00146	-.02493	-.05336	-.00079	.00009	.00314	.00019	-.00080	-.01552	-.00004	-.00017	.00005

Check ? High Limit Low Limit	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3133.1	55026.	6612.0									
Stddev	1.1	522.	39.2									
%RSD	.03584	.94857	.59330									
#1	3132.3	54656.	6639.7									
#2	3133.9	55395.	6584.2									

Sample Name: CCVL3301032II Acquired: 5/30/2015 20:11:43 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00962	.10868	.01502	.10748	.00985	.00089	.10648	.19904	.00540	.01068	.01109	.01481	.09712	3.0228
Stddev	.00038	.00102	.00445	.00055	.00018	.00004	.00306	.00054	.00024	.00001	.00013	.00077	.00104	.0064
%RSD	3.9837	.94279	29.614	.50990	1.8144	4.0922	2.8740	.27277	4.4794	.07396	1.2063	5.2122	1.0665	.21065
#1														
#2														

Check ? Value Range	Chk Pass													

Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00942	.20542	.01059	.01971	1.1680	.04139	3.0566	.00861	.02715	.00905	.01504	.45023	.96350	.10260
Stddev	.00086	.00750	.00006	.00029	.0056	.00055	.0221	.00189	.00366	.00013	.00384	.00678	.01450	.00233
%RSD	9.1674	3.6511	.54816	1.4674	.47819	1.3333	.72355	21.926	13.474	1.4738	25.528	1.5050	1.5050	2.2716
#1														
#2														

Check ? Value Range	Chk Pass	None	Chk Pass											

Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01019	.01521	.01059	.01471	.05832	.01031	.02166	.01454
Stddev	.00001	.00190	.00026	.00022	.01199	.00084	.00025	.00034
%RSD	.05330	12.517	2.4556	1.4791	20.565	8.1179	1.1772	2.3612
#1								
#2								

Check ? Value Range	Chk Pass							

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3130.6	54783.	6671.5
Stddev	3.5	20.	17.0
%RSD	.11315	.03651	.25458
#1	3128.1	54769.	6659.5
#2	3133.1	54797.	6683.5

Sample Name: 280-69701-A-6-B Acquired: 5/30/2015 20:14:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00064	As1890 ppm .14437	B_2089 ppm .01592	Ba4554 ppm .07808	Be3130 ppm .02821	Bi2230 ppm -.00015	Ca3179 ppm .00459	Cd2288 ppm 223.67	Cd2288 ppm -.00009
#1	-.00083	.14564	.01966	.07792	.02828	-.00018	.00539	223.92	.00015	
#2	-.00046	.14309	.01219	.07824	.02814	-.00013	.00379	223.42	-.00034	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00073	Cu3247 ppm .00083	Fe2599 ppm .00138	K_7664 ppm .10925	Li6707 ppm 14.066	Mg2790 ppm .03295	Mn2576 ppm 48.847	Mo2020 ppm 1.5319	Mo2020 ppm .08760
#1	.00067	.00069	.00180	.10819	14.106	.03320	48.925	1.5276	.08784	
#2	.00079	.00096	.00096	.11030	14.025	.03271	48.769	1.5363	.08736	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 101.64	P_1782 ppm .00555	Pb2203 ppm .05295	S_1820 ppm .00456	Sb2068 ppm F 205.76	Se1960 ppm .00135	Si2881 ppm .00763	SiO2 ppm 7.0413	SiO2 ppm 15.068
#1	101.87	.00590	.05332	.00620	206.18	.00472	.00685	7.0414	15.069	
#2	101.40	.00520	.05259	.00292	205.34	-.00201	.00841	7.0412	15.068	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00087	Th2837 ppm 2.2575	Ti3349 ppm .00012	Tl1908 ppm .00305	U_3701 ppm W -.01017	V_2924 ppm .86025	Zn2062 ppm .27864	Zr3391 ppm .00210	Zr3391 ppm .00123
#1	.00105	2.2548	.00090	.00294	-.01104	.85605	.27795	.00261	.00126	
#2	.00069	2.2603	-.00065	.00317	-.00929	.86445	.27933	.00159	.00120	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2920.7	Y_3774 Cts/S 52157.	377.433 {89}				Zn2062 ppm .00097	Zr3391 ppm .00072	Zr3391 ppm .00004
#1	2925.2	52438.	6489.2					34.348	3.6195	
#2	2916.1	51877.	6576.0							

Sample Name: 280-69701-A-7-B Acquired: 5/30/2015 20:17:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00030	As1890 ppm .11177	B_2089 ppm .00459	Ba4554 ppm .07609	Be3130 ppm .02228	Bi2230 ppm -.00017	Ca3179 ppm .00311	Cd2288 ppm 215.31	Cd2288 ppm -.00017
#1	-.00053	.11207	.00656	.07496	.02219	-.00010	.00306	215.64	-.00004	
#2	-.00008	.11146	.00262	.07722	.02236	-.00024	.00317	214.98	-.00030	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00023	Cu3247 ppm .00055	Fe2599 ppm .00089	K_7664 ppm .09945	Li6707 ppm 10.269	Mg2790 ppm .03104	Mn2576 ppm 44.784	Mo2020 ppm .40779	Mo2020 ppm .07831
#1	.00042	.00048	.00104	.09912	10.241	.03092	44.834	.40803	.07814	
#2	.00004	.00063	.00075	.09979	10.297	.03116	44.735	.40755	.07848	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 90.002	P_1782 ppm .00506	Pb2203 ppm .03577	S_1820 ppm .00499	Sb2068 ppm W 189.26	Se1960 ppm .00359	Si2881 ppm .02375	SiO2 ppm 6.6176	SiO2 ppm 14.162
#1	89.924	.00491	.03334	.00538	188.94	.00179	.02266	6.6214	14.170	
#2	90.081	.00522	.03820	.00461	189.58	.00539	.02484	6.6137	14.153	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00038	Th2837 ppm 2.1683	Ti3349 ppm .00125	Tl1908 ppm .00273	U_3701 ppm -.00907	V_2924 ppm .72950	Zn2062 ppm .13061	Zr3391 ppm .00065	Zr3391 ppm .00087
#1	-.00030	2.1710	-.00039	.00257	-.00825	.72845	.13030	.00079	.00039	
#2	-.00045	2.1656	.00289	.00289	-.00988	.73055	.13092	.00052	.00136	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2966.4	Y_3774 Cts/S 52839.	377.433 {89}						
#1	2980.9	52847.	6616.6							
#2	2951.9	52832.	6687.5							

Sample Name: 280-69701-A-8-B Acquired: 5/30/2015 20:19:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00024	As1890 ppm .02787	B_2089 ppm .00629	Ba4554 ppm .07339	Be3130 ppm .01530	Bi2230 ppm .00000	Ca3179 ppm .00429	Cd2288 ppm 193.65
#1	.00004	.02759	-.00562	.07270	.01544	.00003	.00451	193.72	-.00016
#2	-.00052	.02814	-.00695	.07409	.01516	-.00002	.00406	193.58	.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00060	Cu3247 ppm .00052	Fe2599 ppm .00046	K_7664 ppm .02298	Li6707 ppm 3.3088	Mg2790 ppm .04015	Mn2576 ppm 52.801	Mo2020 ppm .11667
#1	-.00048	.00055	.00060	.02107	3.2523	.04048	52.755	.11671	.07322
#2	-.00072	.00049	.00032	.02489	3.3653	.03982	52.848	.11663	.07415
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 166.40	P_1782 ppm .00500	Pb2203 ppm .01380	S_1820 ppm .00428	Sb2068 ppm F 238.02	Se1960 ppm -.00015	Si2881 ppm .02782	SiO2 ppm 5.9797
#1	166.21	.00510	.01337	.00335	237.74	.00264	.02637	5.9434	12.719
#2	166.60	.00490	.01423	.00521	238.30	-.00294	.02927	6.0160	12.874
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00240	Th2837 ppm 2.3229	Ti3349 ppm .00179	Tl1908 ppm -.00948	U_3701 ppm .91426	V_2924 ppm -.00086	Zn2062 ppm .00146	Zr3391 ppm .00062
#1	.00258	2.3264	.00156	.00102	-.00811	.90647	-.00065	.00116	.00124
#2	.00221	2.3193	.00203	.00112	-.01085	.92204	-.00107	.00176	-.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2908.8	Y_3774 Cts/S 52053.	360.073 {94}	377.433 {89}				
#1	2923.9	52017.	6539.2						
#2	2893.6	52089.	6491.7						

Sample Name: 280-69701-A-9-B Acquired: 5/30/2015 20:22:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00005	.08492	.01505	.07947	.02298	-.00016	.00462	214.75	-.00012
#2	.00075	.08347	.01041	.07836	.02361	-.00016	.00388	216.85	-.00009
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00014	.00076	.00080	.07846	10.284	.02995	42.920	.05473	.05994
#2	-.00018	.00090	.00107	.07855	10.464	.02799	43.232	.05575	.05896
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	87.548	.00456	.03872	.00386	176.91	.00353	.00798	6.4697	13.845
#2	89.368	.00388	.03676	.00430	174.08	.00213	.01441	6.5603	14.039
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00140	2.1587	.00113	.00229	-.01201	.59563	.26258	.00184	.00056
#2	.00018	2.1726	.00055	.00148	-.01099	.60183	.27036	.00239	.00153
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2862.8	50668.	6493.2						
#2	2900.9	50306.	6344.2						

Sample Name: 280-69701-A-10-B Acquired: 5/30/2015 20:24:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00002	.10134	.00737	.06436	.02446	-.00033	.00620	198.97	-.00013
#2	.00011	.10208	.01119	.06486	.02432	-.00006	.01123	196.75	-.00025
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00072	.00058	.00171	.08854	12.376	.02915	47.037	1.1715	.13099
#2	.00060	.00068	.00117	.08749	12.339	.03152	46.703	1.1647	.13001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	98.806	.00604	.03470	.00379	181.16	.00462	.01351	6.7298	14.402
#2	98.699	.00583	.03554	.00532	181.17	.00372	.01327	6.7133	14.366
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00085	1.9500	.00253	.00207	-.00717	1.2139	.22042	.00064	.00101
#2	.00175	1.9290	.00122	.00231	-.00970	1.1962	.21873	.00138	-.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2891.7	50416.	6280.2						
#2	2900.5	50636.	6359.7						

Sample Name: 280-69701-A-11-B Acquired: 5/30/2015 20:27:32 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00052	.10161	.01111	.06831	.02233	-.00018	.00509	195.17	-.00041
#2	-.00039	.10354	.00188	.06833	.02273	-.00015	.00517	196.61	.00007
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00010	.00097	.00079	.07493	6.1327	.03721	51.964	.88683	.19120
#2	-.00023	.00061	.00108	.07825	6.1961	.03552	52.314	.88923	.19258
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	121.29	.00610	.03356	.00490	207.39	.00105	.03443	6.4802	13.868
#2	123.32	.00626	.02477	.00539	209.89	.00293	.03786	6.5664	14.052
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00087	2.1399	.00087	.00222	-.01019	1.2235	.14431	.00223	-.00051
#2	.00217	2.1627	-.00151	.00207	-.00649	1.3051	.14525	.00209	.00164
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2887.1	51049.	6377.3						
#2	2886.6	51440.	6402.1						

Sample Name: 280-69701-A-12-B Acquired: 5/30/2015 20:30:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00010	As1890 ppm .09791	B_2089 ppm .01376	Ba4554 ppm .08139	Be3130 ppm .03421	Bi2230 ppm -.00030	Ca3179 ppm .00316	Cd2288 ppm 209.72	
#1	-.00038	.09710	.00958	.08046	.03457	-.00035	.00477	211.62	.00017	
#2	.00018	.09871	.01794	.08231	.03385	-.00026	.00154	207.83	-.00060	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00033	Cu3247 ppm .00071	Fe2599 ppm .00069	K_7664 ppm 8.2493	Li6707 ppm .03063	Mg2790 ppm 42.299	Mn2576 ppm .00221	Mo2020 ppm .04109	
#1	-.00023	.00069	.00090	.06538	8.3218	.03096	42.751	.00227	.04008	
#2	-.00042	.00073	.00049	.06680	8.1768	.03030	41.848	.00214	.04210	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .88.839	P_1782 ppm .00340	Pb2203 ppm .03427	S_1820 ppm .00427	Sb2068 ppm 177.38	Se1960 ppm .00254	Si2881 ppm .01643	SiO2 ppm 6.3864	
#1	89.345	.00325	.03319	.00443	175.48	.00084	.02068	6.4522	13.808	
#2	88.333	.00356	.03534	.00411	179.28	.00424	.01219	6.3205	13.526	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00263	Th2837 ppm 2.2763	Ti3349 ppm .00192	Tl1908 ppm -.00224	U_3701 ppm -.00863	V_2924 ppm .32654	Zn2062 ppm .33110	Zr3391 ppm .00034	
#1	.00219	2.2969	.00325	.00197	-.00750	.34731	.33583	.00068	.00074	
#2	.00307	2.2557	.00059	.00251	-.00977	.30577	.32637	-.00001	.00101	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2910.9	Y_3774 Cts/S 52010.	377.433 {89}						
#1	2906.8	52273.	6494.9							
#2	2915.0	51748.	6653.2							

Sample Name: 280-69701-A-13-BII Acquired: 5/30/2015 20:32:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279417 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00048	As1890 ppm .17891	B_2089 ppm .00738	Ba4554 ppm .08047	Be3130 ppm .03451	Bi2230 ppm -.00028	Ca3179 ppm .00255	Cd2288 ppm 209.45
#1	-.00050	.18041	.00741	.08000	.03412	-.00032	.00041	207.43	-.00034
#2	-.00045	.17740	.00734	.08093	.03489	-.00024	.00469	211.46	-.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00024	Cu3247 ppm .00083	Fe2599 ppm .00086	K_7664 ppm 9.8189	Li6707 ppm .02839	Mg2790 ppm 42.673	Mn2576 ppm .07116	Mo2020 ppm .05474
#1	-.00018	.00104	.00088	.14640	9.7146	.02897	42.689	.07117	.05449
#2	-.00029	.00063	.00084	.14897	9.9232	.02782	42.658	.07115	.05499
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 87.786	P_1782 ppm .00421	Pb2203 ppm .03851	S_1820 ppm .00464	Sb2068 ppm W 181.66	Se1960 ppm .00114	Si2881 ppm .01542	SiO2 ppm 6.3775
#1	86.667	.00435	.04051	.00408	181.72	.00172	.01650	6.2968	13.475
#2	88.904	.00408	.03652	.00521	181.60	.00056	.01434	6.4582	13.821
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00127	Th2837 ppm 2.1455	Ti3349 ppm -.00055	Tl1908 ppm .00325	U_3701 ppm -.00865	V_2924 ppm .54465	Zn2062 ppm .31503	Zr3391 ppm .00103
#1	.00064	2.1279	-.00040	.00313	-.00818	.52423	.31705	.00136	.00189
#2	.00190	2.1631	-.00069	.00337	-.00912	.56506	.31300	.00069	.00025
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2914.4	Y_3774 Cts/S 51553.	360.073 {943}	377.433 {89}				
#1	2912.8	51505.	6577.2						
#2	2915.9	51602.	6442.1						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 20:35:27 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -00732	Al3092 ppm 49.782	As1890 ppm .00093	B_2089 ppm .00103	Ba4554 ppm .00059	Be3130 ppm .00002	Bi2230 ppm 1.0255	Ca3179 ppm .04943	Cd2288 ppm -.00025	Co2286 ppm -.00027	Cr2055 ppm .00061
#1	-.00773	49.828	.00192	.00133	.00040	-.00003	1.0394	.05635	-.00038	.00000	.00060
#2	-.00692	49.736	-.00007	.00072	.00079	.00007	1.0116	.04251	-.00011	-.00054	.00062
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00163	Fe2714 ppm 49.067	K_7664 ppm .03005	Li6707 ppm -.00185	Mg2790 ppm .04749	Mn2576 ppm -.00151	Mo2020 ppm -.00091	Na8183 ppm 251.21	Ni2316 ppm .00234	P_1782 ppm .00651	Pb2203 ppm .00102
#1	-.00132	48.965	-.00086	-.00150	.04726	-.00159	-.00094	250.96	.00229	.00937	.00122
#2	-.00194	49.169	.06096	-.00219	.04772	-.00143	-.00087	251.45	.00239	.00364	.00082
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.0197	Sb2068 ppm -.01161	Se1960 ppm .00827	Si2881 ppm -.05994	SiO2 ppm -.12827	Sn1899 ppm -.00131	Sr4077 ppm .00048	Th2837 ppm 5.0247	Ti3349 ppm -.01266	TI1908 ppm .00116	U_3701 ppm W 10.690
#1	5.0831	-.01348	.00927	-.04584	-.09809	-.00148	.00051	5.0126	-.01285	.00038	10.716
#2	4.9563	-.00973	.00727	-.07404	-.15846	-.00115	.00045	5.0368	-.01247	.00194	10.663
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00297	Zn2062 ppm -.00036	Zr3391 ppm -.12858								
#1	.00313	-.00014	-.12865								
#2	.00281	-.00059	-.12850								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3056.9	Y_3600 Cts/S 53281.	Y_3774 Cts/S 6570.0								
#1	3048.8	53352.	6574.5								
#2	3065.0	53210.	6565.5								

Sample Name: CCV-3296664 Acquired: 5/30/2015 20:38:10 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48346	.51359	.96496	.49939	.49520	.48542	.00144	4.8695	.48964	.48948	.51886	.49118	2.4441
Stddev	.00357	.00536	.00065	.00020	.00068	.00023	.00182	.0124	.00320	.00156	.00488	.00202	.0023
%RSD	.73897	1.0427	.06781	.03996	.13634	.04660	126.04	.25399	.65426	.31834	.94145	.41144	.09327
#1	.48598	.51738	.96450	.49954	.49473	.48558	.00273	4.8608	.48738	.49058	.52231	.49261	2.4457
#2	.48093	.50981	.96542	.49925	.49568	.48526	.00016	4.8783	.49191	.48838	.51540	.48975	2.4425

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.100	.99491	19.078	.50318	.48353	5.1880	.48443	1.0011	.95336	.03875	.98522	.97034	4.8413
Stddev	.137	.00150	.134	.00386	.00149	.0083	.00170	.0029	.00273	.00514	.00262	.00110	.0186
%RSD	.27848	.15065	.70281	.76697	.30723	.15970	.35015	.28917	.28642	13.275	.26642	.11327	.38316
#1	49.003	.99385	19.172	.50591	.48458	5.1822	.48563	1.0032	.95529	.04239	.98708	.97111	4.8282
#2	49.196	.99597	18.983	.50045	.48248	5.1939	.48323	.99907	.95143	.03511	.98337	.96956	4.8545

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.360	.96405	.49528	.00034	.50162	.97686	-.00904	.51587	.48525	.49129
Stddev	.040	.00308	.00041	.00050	.00524	.00068	.00917	.00451	.00209	.00198
%RSD	.38316	.31973	.08202	147.42	1.0444	.06925	101.39	.87445	.43033	.40363
#1	10.332	.96623	.49499	.00069	.50532	.97734	-.01552	.51906	.48673	.49269
#2	10.389	.96187	.49556	-.00001	.49792	.97639	-.00256	.51268	.48378	.48989

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3184.5	54077.	6534.5									
Stddev	17.6	299.	9.0									
%RSD	.55353	.55315	.13767									
#1	3196.9	53866.	6528.1									
#2	3172.0	54289.	6540.9									

Sample Name: CCB Acquired: 5/30/2015 20:40:39 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.0034	-0.0055	.00134	.00101	-0.00017	.00007	.00217	.00058	-0.00043	.00007	.00003	-0.00132	.00143
Stddev	.00016	.00072	.00233	.00045	.00007	.00006	.00025	.00230	.00009	.00007	.00035	.00041	.00064
%RSD	46.169	130.10	173.19	44.560	38.858	82.109	11.369	394.57	21.449	99.075	1351.5	31.143	44.928
#1	-.00023	-.00106	.00299	.00069	-.00012	.00003	.00235	-.00104	-.00037	.00002	.00027	-.00161	.00097
#2	-.00046	-.00004	-.00030	.00133	-.00022	.00011	.00200	.00220	-.00050	.00012	-.00022	-.00103	.00188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.01196	-.00101	.00151	-.00006	.00005	.11553	-.00005	.00337	-.00017	.02437	.00107	.00140	-.03415
Stddev	.05229	.00024	.00027	.00002	.00033	.00955	.00061	.00091	.00069	.00091	.00058	.00281	.00911
%RSD	437.32	24.104	17.879	40.182	724.21	8.2678	1124.5	26.919	414.97	3.7194	54.228	200.83	26.685
#1	.04893	-.00118	.00170	-.00004	.00028	.10878	.00038	.00273	.00032	.02501	.00066	.00338	-.02771
#2	-.02502	-.00083	.00132	-.00008	-.00019	.12229	-.00049	.00401	-.00066	.02373	.00148	-.00059	-.04059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.07308	-.00005	.00006	.00163	.00042	.00010	-.00834	.00071	-.00018	.00214			
Stddev	.01950	.00042	.00003	.00131	.00002	.00150	.02506	.00012	.00024	.00078			
%RSD	26.685	823.32	57.521	80.608	5.7256	1572.6	300.53	16.858	135.96	36.517			
#1	-.05929	-.00035	.00008	.00070	.00044	-.00097	.00938	.00080	-.00001	.00269			
#2	-.08687	.00025	.00003	.00255	.00040	.00116	-.02606	.00063	-.00035	.00158			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Units	3178.5	55412.	6779.9										
Avg	1.4	421.	33.5										
Stddev	.04320	.75962	.49340										
#1	3179.5	55710.	6803.6										
#2	3177.5	55115.	6756.2										

Sample Name: CCVL3301032II Acquired: 5/30/2015 20:43:03 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00874	.10580	.01635	.10493	.00964	.00095	.10586	.19178	.00494	.01061	.01091	.01396	.09387	2.9241
Stddev	.00008	.00084	.00014	.00201	.00031	.00006	.00256	.00409	.00005	.00033	.00007	.00001	.00497	.0108
%RSD	.86499	.79518	.84868	1.9122	3.2272	6.3105	2.4148	2.1350	.95830	3.0993	.60216	.10448	5.2961	.37049
#1	.00879	.10640	.01625	.10635	.00942	.00091	.10767	.18889	.00491	.01084	.01096	.01397	.09035	2.9165
#2	.00869	.10521	.01645	.10351	.00986	.00099	.10406	.19468	.00497	.01038	.01086	.01395	.09738	2.9318

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00934	.19416	.01023	.02006	1.1109	.04090	2.9880	.00757	.02744	.00784	.01668	.44525	.95284	.10067
Stddev	.00113	.00245	.00005	.00000	.0212	.00063	.0558	.00118	.00459	.00216	.00239	.00805	.01722	.00285
%RSD	12.102	1.2622	.44044	.00151	1.9106	1.5373	1.8660	15.580	16.737	27.589	14.352	1.8070	1.8070	2.8275
#1	.00854	.19243	.01020	.02006	1.0959	.04134	3.0274	.00840	.02420	.00631	.01838	.43956	.94066	.10268
#2	.01014	.19589	.01026	.02006	1.1260	.04045	2.9485	.00674	.03069	.00938	.01499	.45094	.96502	.09865

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00979	.01826	.01013	.01659	.06435	.01078	.02093	.01499
Stddev	.00016	.00021	.00014	.00288	.02804	.00054	.00057	.00016
%RSD	1.6446	1.1609	1.3557	17.334	43.583	5.0304	2.7248	1.0500
#1	.00968	.01841	.01003	.01863	.08418	.01117	.02133	.01488
#2	.00991	.01811	.01023	.01456	.04452	.01040	.02053	.01510

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3152.7	55547.	6773.7
Stddev	10.8	27.	7.6
%RSD	.34296	.04922	.11239
#1	3145.1	55566.	6779.1
#2	3160.4	55527.	6768.3

Sample Name: MB 280-279415/1-A Acquired: 5/30/2015 20:45:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.00281	.00070	.00092	.00018	.00001	-.00087	.01342	-.00031
Stddev	.00012	.00011	.00266	.00127	.00013	.00001	.00185	.00100	.00010
%RSD	119.18	3.9300	382.16	138.24	73.543	241.55	211.51	7.4489	32.157
#1	.00018	.00289	-.00118	.00182	.00027	.00000	.00043	.01271	-.00038
#2	.00002	.00273	.00258	.00002	.00009	.00002	-.00218	.01412	-.00024
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.00006	-.00152	.00936	.00199	-.00143	-.00003	.00025	-.00023
Stddev	.00031	.00005	.00005	.00026	.02116	.00141	.00410	.00004	.00040
%RSD	141.80	79.238	3.1073	2.7751	1062.4	98.669	15688.	16.176	172.19
#1	.00000	.00003	-.00155	.00955	.01696	-.00243	.00287	.00022	-.00051
#2	.00044	.00010	-.00149	.00918	-.01297	-.00043	-.00292	.00028	.00005
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09376	.00014	.00375	-.00035	.02457	-.00214	-.00149	-.02377	-.05087
Stddev	.00633	.00007	.00089	.00079	.00079	.00073	.00485	.01247	.02668
%RSD	6.7533	52.447	23.732	228.13	3.1978	34.199	324.44	52.451	52.451
#1	.08928	.00020	.00438	.00021	.02402	-.00266	.00193	-.01495	-.03200
#2	.09823	.00009	.00312	-.00091	.02513	-.00162	-.00492	-.03259	-.06973
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00126	.00002	.00250	.00039	-.00104	-.02120	.00053	.00084	.00015
Stddev	.00038	.00001	.00066	.00024	.00009	.02860	.00020	.00029	.00107
%RSD	30.317	64.065	26.535	61.832	8.7791	134.90	37.237	34.271	700.17
#1	.00153	.00001	.00297	.00022	-.00110	-.00098	.00067	.00063	-.00060
#2	.00099	.00003	.00203	.00056	-.00097	-.04143	.00039	.00104	.00091
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3199.1	56903.	6909.4						
Stddev	10.8	187.	65.8						
%RSD	.33752	.32919	.95221						
#1	3206.7	57036.	6862.8						
#2	3191.4	56771.	6955.9						

Sample Name: LCS 280-279415/2-A Acquired: 5/30/2015 20:48:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 455.403 { 74}	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm
#1	.04263	1.9374	.99482	1.0421	1.9418	.04700	1.9903	45.900	.10111
#2	.04282	1.9304	.99388	1.0413	1.9176	.04667	1.9868	45.293	.10090
Check ? High Limit Low Limit	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 766.490 { 44}	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm
#1	.48732	.20086	.23997	.94445	48.358	.97519	45.890	.48787	1.0260
#2	.48661	.20182	.24061	.93125	47.761	.96167	45.738	.48529	1.0250
Check ? High Limit Low Limit	Chk Pass .05750 .04275	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 56.500 46.000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 { 41}	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm
#1	51.929	.48073	10.516	.48765	2.0503	.52969	2.0339	9.3311	19.969
#2	51.778	.47990	10.440	.48286	2.0139	.51662	2.0073	9.3042	19.911
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
#1	1.9748	.96901	.98561	.98574	1.9710	2.0238	.50229	.45766	.45122
#2	1.9522	.95837	.98248	.98202	1.9391	2.0298	.49940	.45182	.44570
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	377.433 { 89}					
#1	3049.0	54219.	6800.2						
#2	3054.5	54605.	6901.2						

Sample Name: 280-69701-A-14-B Acquired: 5/30/2015 20:50:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00020	.54774	.00890	.07947	.03299	-.00023	.00443	219.77	-.00017
#2	.00056	.58475	.01526	.08461	.03335	-.00027	.00560	220.83	.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00007	.00122	.00200	.38405	11.571	.03059	47.206	.21843	.06699
#2	.00018	.00099	.00170	.39381	11.730	.03060	46.891	.21776	.07149
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	93.913	.00573	.05405	.00125	187.51	.00128	.02347	7.5561	16.170
#2	96.124	.00595	.06137	.00245	201.06	.00562	.02554	7.7286	16.539
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00200	2.2471	.00284	.01294	-.00758	.70568	.33345	.00370	.00013
#2	.00197	2.2540	-.00212	.01306	-.01007	.78886	.33035	.00389	.00181
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2966.6	50589.	6628.8						
#2	2825.6	50935.	6566.0						

Sample Name: 280-69701-A-15-B Acquired: 5/30/2015 20:53:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00065	As1890 ppm .30131	B_2089 ppm .01646	Ba4554 ppm .08674	Be3130 ppm .03144	Bi2230 ppm -.00022	Ca3179 ppm -.00036	Cd2288 ppm 239.48
#1	-.00093	.30032	.01509	.08648	.03146	-.00015	.00013	237.61	-.00035
#2	-.00038	.30230	.01783	.08699	.03142	-.00029	-.00086	241.35	-.00037
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00016	Cu3247 ppm .00086	Fe2599 ppm .00113	K_7664 ppm .21450	Li6707 ppm 6.3069	Mg2790 ppm .04318	Mn2576 ppm 50.868	Mo2020 ppm .00512
#1	-.00022	.00082	.00114	.21308	6.2689	.04250	51.172	.00507	.02472
#2	-.00010	.00091	.00111	.21592	6.3450	.04386	50.564	.00518	.02511
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 106.06	P_1782 ppm .00423	Pb2203 ppm .03228	S_1820 ppm .00493	Sb2068 ppm F 214.56	Se1960 ppm .00342	Si2881 ppm .02124	SiO2 ppm 6.6744
#1	106.65	.00421	.03407	.00590	213.46	.00525	.01836	6.6234	14.174
#2	105.48	.00425	.03050	.00395	215.66	.00159	.02413	6.7254	14.392
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00009	Th2837 ppm 2.9087	Ti3349 ppm .00171	Tl1908 ppm .00764	U_3701 ppm W -.01044	V_2924 ppm .17389	Zn2062 ppm .35575	Zr3391 ppm .00416
#1	-.00020	2.9040	.00144	.00796	-.01015	.20219	.35530	.00420	.00146
#2	-.00037	2.9134	.00197	.00732	-.01074	.14560	.35619	.00411	.00107
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2961.6	Y_3774 Cts/S 53439.	377.433 {89}				Zn2062 ppm .00006	Zr3391 ppm .00006
#1	2983.0	53420.	6867.1					21.670	
#2	2940.3	53459.	57.4						
			.83591						

Sample Name: 280-69701-A-16-B Acquired: 5/30/2015 20:55:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00012	.33625	.01473	.07902	.03769	-.00024	.00027	217.30	-.00014
#2	-.00012	.33617	.01602	.07962	.03721	-.00027	-.00078	216.34	-.00009
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00003	.00088	.00039	.23962	8.0359	.03476	44.991	.01063	.03716
#2	-.00002	.00092	.00129	.23821	.796	.00057	.146	.00026	.00015
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	99.206	.00382	.04054	.00379	187.36	.00332	.01902	6.8098	14.573
#2	96.962	.00363	.03465	.00297	187.08	.00060	.01551	6.6436	14.217
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00126	2.4665	.00008	.00632	-.00657	.29887	.34456	.00383	.00041
#2	.00165	2.4533	.00111	.00662	-.00940	.29291	.35827	.00409	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3034.9	53434.	6680.3						
#2	3047.5	53262.	6742.0						

Sample Name: 280-69701-A-17-B Acquired: 5/30/2015 20:58:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00052	As1890 ppm .01033	B_2089 ppm .00124	Ba4554 ppm .07116	Be3130 ppm .01513	Bi2230 ppm .00002	Ca3179 ppm 201.16	Cd2288 ppm -.00035
#1	-.00064	.01001	.00443	.07082	.01525	-.00004	.00383	201.36	-.00047
#2	-.00041	.01065	-.00690	.07150	.01502	.00007	.00342	200.95	-.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00009	Cu3247 ppm .00071	Fe2599 ppm .00012	K_7664 ppm .00903	Li6707 ppm 3.8687	Mg2790 ppm .02989	Mn2576 ppm 41.767	Mo2020 ppm .00028
#1	.00020	.00062	.00000	.01047	3.8863	.02799	41.746	.00031	.13699
#2	-.00038	.00080	-.00024	.00760	3.8510	.03178	41.788	.00026	.13818
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 90.141	P_1782 ppm .00397	Pb2203 ppm .00793	S_1820 ppm .00563	Sb2068 ppm 168.28	Se1960 ppm .00317	Si2881 ppm .00354	SiO2 ppm 5.8252
#1	89.812	.00382	.00847	.00486	168.44	.00502	.00920	5.8010	12.414
#2	90.470	.00412	.00739	.00640	168.11	.00131	-.00212	5.8494	12.518
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00159	Th2837 ppm 2.1067	Ti3349 ppm .00148	Tl1908 ppm .00051	U_3701 ppm W -.01078	V_2924 ppm .37266	Zn2062 ppm .02213	Zr3391 ppm .00137
#1	.00186	2.1088	.00119	.00034	-.01139	.37765	.02227	.00129	.00117
#2	.00131	2.1047	.00177	.00069	-.01017	.36767	.02199	.00144	.00228
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2960.6	Y_3774 Cts/S 52143.	360.073 {94}	377.433 {89}				
#1	2952.7	52221.	6615.5						
#2	2968.5	52065.	6583.9						

Sample Name: 280-69748-A-2-B Acquired: 5/30/2015 21:01:06 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00021	As1890 ppm .00457	B_2089 ppm .00103	Ba4554 ppm .01109	Be3130 ppm .08422	Bi2230 ppm -.00001	Ca3179 ppm .00314	Cd2288 ppm 20.209
#1	.00014	.00477	-.00167	.01080	.08428	-.00001	.00392	20.237	.00027
#2	-.00056	.00437	.00374	.01139	.08417	-.00001	.00237	20.180	-.00014
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00002	Cu3247 ppm .00033	Fe2599 ppm -.00107	K_7664 ppm .03530	Li6707 ppm .86378	Mg2790 ppm .00577	Mn2576 ppm 4.3370	Mo2020 ppm .00038
#1	.00020	.00034	-.00108	.03525	.87671	.00518	4.3462	.00038	-.00076
#2	-.00024	.00031	-.00106	.03535	.85085	.00635	4.3279	.00037	-.00077
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 14.562	P_1782 ppm .00138	Pb2203 ppm .02776	S_1820 ppm .00026	Sb2068 ppm 7.5796	Se1960 ppm -.00148	Si2881 ppm .00367	SiO2 ppm 10.483
#1	14.504	.00120	.03010	.00053	7.5451	-.00015	.00101	10.457	22.378
#2	14.621	.00156	.02543	-.00001	7.6141	-.00282	.00634	10.508	22.487
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00162	Th2837 ppm .13533	Ti3349 ppm .00262	Tl1908 ppm -.00005	U_3701 ppm -.00185	V_2924 ppm -.02835	Zn2062 ppm .00078	Zr3391 ppm .00161
#1	.00187	.13522	.00197	.00032	-.00193	-.00763	.00064	.00154	.00129
#2	.00138	.13545	.00327	-.00043	-.00177	-.04906	.00091	.00167	.00110
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3130.9	Y_3774 Cts/S 54573.	377.433 {89}					
#1	3125.7	54470.	6676.3						
#2	3136.0	54676.	6733.0						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 21:03:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00752	47.684	.00427	.00082	.00072	.00003	1.0088	.03343	-.00026	-.00028	.00047	-.00162	47.548
Stddev	.00015	.160	.00025	.00070	.00005	.00001	.0045	.00274	.00001	.00056	.00001	.00020	.032
%RSD	1.9795	.33485	5.7506	85.093	6.9329	20.211	.44584	8.1914	5.6103	201.25	2.8648	12.597	.06723
#1	-.00763	47.797	.00445	.00131	.00076	.00003	1.0056	.03536	-.00025	-.00067	.00046	-.00176	47.570
#2	-.00742	47.571	.00410	.00033	.00069	.00004	1.0120	.03149	-.00027	.00012	.00048	-.00148	47.525
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.04011	-.00105	.04997	.00154	-.00023	239.91	.00228	.00771	.00125	4.9477	-.00994	.00290	-.04931
Stddev	.01507	.00020	.00881	.00005	.00018	1.73	.00002	.00102	.00021	.0407	.00020	.00061	.00348
%RSD	37.576	19.192	17.624	2.9267	79.956	.72002	.71876	13.177	16.732	.82252	2.0184	20.970	7.0552
#1	.02945	-.00091	.04375	-.00151	-.00036	241.13	.00227	.00699	.00140	4.9189	-.01008	.00333	-.05177
#2	.05076	-.00120	.05620	-.00157	-.00010	238.69	.00229	.00843	.00110	4.9765	-.00979	.00247	-.04685
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.10551	-.00117	.00034	4.8813	-.01173	.00192	10.379	.00325	-.00068	-.12624			
Stddev	.00744	.00000	.00006	.0125	.00028	.00058	.096	.00029	.00019	.00319			
%RSD	7.0552	.01796	18.071	.25572	2.3877	30.139	.92358	9.0518	28.720	2.5261			
#1	-.11078	-.00117	.00029	4.8902	-.01193	.00151	10.311	.00304	-.00081	-.12850			
#2	-.10025	-.00117	.00038	4.8725	-.01154	.00233	10.447	.00346	-.00054	-.12399			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3087.0	54356.	6846.9										
Stddev	7.5	295.	11.7										
%RSD	.24160	.54350	.17078										
#1	3092.2	54147.	6838.6										
#2	3081.7	54565.	6855.2										

Sample Name: CCV-3296664 Acquired: 5/30/2015 21:06:28 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.47699	.52904	.98795	.51522	.47682	.46728	.00116	4.6996	.50305	.50082	.51688	.48315	2.3715
Stddev	.00026	.00074	.00063	.00233	.00247	.00184	.00307	.0250	.00096	.00298	.00295	.00076	.0118
%RSD	.05366	.14027	.06383	.45181	.51819	.39471	265.77	.53223	.19077	.59566	.57155	.15833	.49942
#1	.47681	.52851	.98751	.51357	.47508	.46597	.00333	4.6819	.50237	.49871	.51479	.48369	2.3631
#2	.47717	.52956	.98840	.51686	.47857	.46858	-.00102	4.7173	.50373	.50292	.51897	.48261	2.3799

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	47.393	.95742	18.784	.49390	.49354	5.0091	.49541	1.0244	.97504	.02617	1.0049	.98835	4.6369
Stddev	.101	.00010	.049	.00041	.00206	.0029	.00304	.0062	.00879	.00482	.0059	.00412	.0592
%RSD	.21237	.01053	.26042	.08312	.41728	.05798	.61267	.60224	.90197	18.409	.58614	.41637	1.2762
#1	47.321	.95735	18.750	.49361	.49209	5.0112	.49326	1.0200	.96883	.02958	1.0008	.98544	4.5950
#2	47.464	.95750	18.819	.49419	.49500	5.0070	.49755	1.0288	.98126	.02276	1.0091	.99126	4.6787

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	9.9229	.98525	.47689	.00039	.49128	1.0012	-.01236	.50414	.47738	.46823
Stddev	.1266	.00358	.00181	.00419	.00145	.0051	.02715	.00301	.00429	.00076
%RSD	1.2762	.36290	.38029	1072.3	.29610	.51305	219.60	.59623	.89838	.16187
#1	9.8334	.98272	.47560	.00335	.49025	.99761	-.03156	.50202	.47434	.46770
#2	10.012	.98778	.47817	-.00257	.49231	1.0049	.00683	.50627	.48041	.46877

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3103.4	54282.	6645.6										
Stddev	1.4	48.	47.4										
%RSD	.04473	.08832	.71329										
#1	3104.4	54315.	6679.1										
#2	3102.4	54248.	6612.1										

Sample Name: CCB Acquired: 5/30/2015 21:08:58 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00043	Al1670 ppm -.00006	As1890 ppm -.00040	B_2089 ppm .00078	Ba4554 ppm -.00013	Be3130 ppm .00000	Bi2230 ppm .00005	Ca3179 ppm -.00406	Cd2288 ppm -.00019	Co2286 ppm .00010	Cr2055 ppm .00002	Cu3247 ppm -.00126	Fe2599 ppm -.00062
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.02810	Li6707 ppm -.00122	Mg2790 ppm -.00068	Mn2576 ppm -.00002	Mo2020 ppm .00028	Na5895 ppm .10249	Ni2316 ppm .00021	P_1782 ppm .00043	Pb2203 ppm -.00159	S_1820 ppm .02092	Sb2068 ppm -.00087	Se1960 ppm -.00157	Si2881 ppm -.03902
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.08351	Sn1899 ppm -.00027	Sr4077 ppm .00002	Th2837 ppm .00147	Ti3349 ppm .00025	TI1908 ppm -.00128	U_3701 ppm -.04328	V_2924 ppm .00025	Zn2062 ppm .00037	Zr3391 ppm .00086			
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3132.6	Y_3600 Cts/S 54529.	Y_3774 Cts/S 6572.6										
#1													
#2													

Sample Name: CCVL3301032 Acquired: 5/30/2015 21:11:21 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00906	.10441	.01454	.10446	.00947	.00086	.10149	.19046	.00499	.01018	.01026	.01348
Stddev	.00010	.00034	.00384	.00094	.00005	.00005	.00144	.00411	.00002	.00009	.00012	.00009
%RSD	1.0727	.32168	26.408	.89599	.51747	5.4714	1.4182	2.1586	.49847	.90177	1.1462	.68384
#1	.00899	.10417	.01182	.10380	.00951	.00083	.10251	.18755	.00500	.01011	.01034	.01355
#2	.00913	.10465	.01725	.10512	.00944	.00090	.10047	.19336	.00497	.01024	.01017	.01342

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09511	2.8449	.00944	.18820	.01015	.01934	1.0830	.03971	2.9777	.00901	.02083	F .00653
Stddev	.00015	.0252	.00021	.00130	.00003	.00046	.0075	.00025	.0021	.00217	.00465	.00243
%RSD	.15579	.88619	2.2394	.68939	.32171	2.3655	.69401	.63797	.06903	24.096	22.349	37.234
#1	.09522	2.8628	.00929	.18912	.01012	.01902	1.0883	.03953	2.9763	.00747	.01753	.00825
#2	.09501	2.8271	.00959	.18729	.01017	.01967	1.0777	.03989	2.9792	.01054	.02412	.00481

Check ? Value Range	Chk Pass	None	Chk Fail .01000 -30.000%									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01400	.45169	.96661	.10138	.00966	.01541	.00988	.01658	.06705	.01070	.02093	.01400
Stddev	.00059	.00966	.02067	.00075	.00005	.00055	.00020	.00379	.01204	.00026	.00143	.00162
%RSD	4.2165	2.1379	2.1379	.74358	.54780	3.5943	2.0425	22.875	17.963	2.4395	6.8388	11.575
#1	.01358	44486	.95200	.10191	.00962	.01580	.00974	.01390	.05854	.01088	.01992	.01285
#2	.01442	.45852	.98122	.10085	.00969	.01502	.01003	.01926	.07557	.01051	.02195	.01515

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3106.9	54906.	6558.2
Stddev	.6	80.	92.7
%RSD	.02026		.14626
#1	3106.5		54962.
#2	3107.4		54849.
	6492.6		6623.7

Sample Name: 280-69748-A-4-D Acquired: 5/30/2015 21:14:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.00592	.00431	.01153	.08710	.00003	.00141	.21.081	.00008
Stddev	.00022	.00027	.00069	.00020	.00086	.00001	.00037	.149	.00012
%RSD	108.64	4.6081	15.938	1.7400	.98870	24.520	26.081	.70651	155.44
#1	-.00036	.00572	-.00479	.01167	.08771	-.00002	-.00167	21.186	-.00001
#2	-.00005	.00611	-.00382	.01139	.08649	-.00003	-.00115	20.975	.00017
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	.00040	-.00101	.00509	.88562	.00704	4.5053	.00040	-.00035
Stddev	.00030	.00006	.00004	.00152	.05291	.00029	.0154	.00001	.00061
%RSD	83.931	15.175	3.8120	29.959	5.9744	4.1001	.34106	1.7085	172.93
#1	-.00058	.00036	-.00104	.00401	.84821	.00725	4.4945	.00040	.00008
#2	-.00015	.00045	-.00098	.00617	.92303	.00684	4.5162	.00041	-.00078
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.548	.00113	.02746	-.00042	7.8339	-.00193	.00288	11.100	23.754
Stddev	.169	.00076	.00333	.00098	.0449	.00158	.00327	.057	.122
%RSD	1.0881	66.869	12.120	233.69	.57385	82.209	113.53	.51279	.51279
#1	15.668	.00060	.02981	-.00111	7.8021	-.00305	.00519	11.140	23.840
#2	15.428	.00167	.02511	.00027	7.8657	-.00081	.00057	11.060	23.667
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.14016	.00292	.00004	-.00280	-.00424	.00009	.00079	-.00032
Stddev	.00131	.00128	.00007	.00001	.00005	.01247	.00027	.00101	.00019
%RSD	161.18	.91379	2.2440	23.220	1.7668	294.00	291.60	128.27	58.863
#1	-.00011	.14107	.00287	.00005	-.00277	-.01306	-.00010	.00007	-.00019
#2	.00173	.13926	.00297	.00004	-.00284	.00458	.00029	.00150	-.00046
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3116.8	54412.	6523.3						
Stddev	3.3	49.	25.3						
%RSD	.10676	.09003	.38707						
#1	3114.4	54377.	6505.4						
#2	3119.1	54446.	6541.2						

Sample Name: 280-69748-A-4-D SD@5 Acquired: 5/30/2015 21:16:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00064	.00130	.00302	.01764	-.00009	-.00035	4.4556	.00006
Stddev	.00001	.00006	.00154	.00119	.00035	.00005	.00136	.0730	.00008
%RSD	2.4050	9.5831	118.98	39.312	1.9774	58.593	392.68	1.6376	134.76
#1	-.00033	.00068	.00021	.00387	.01789	-.00013	.00062	4.5072	.00012
#2	-.00032	.00060	.00239	.00218	.01740	-.00005	-.00131	4.4040	.00000
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00014	-.00141	.00115	.17818	-.00069	.92652	.00001	-.00014
Stddev	.00012	.00024	.00026	.00158	.02216	.00169	.00634	.00002	.00005
%RSD	21.478	170.79	18.561	136.83	12.435	244.41	.68387	380.17	38.709
#1	.00045	-.00003	-.00160	.00004	.19385	-.00189	.93100	-.00001	-.00010
#2	.00062	.00031	-.00123	.00227	.16252	.00050	.92204	.00002	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9424	.00057	.00840	.00034	1.6055	-.00521	.00186	2.2178	4.7461
Stddev	.0440	.00018	.00289	.00140	.0127	.00310	.00116	.0226	.0483
%RSD	1.4936	30.901	34.409	416.25	.78789	59.476	62.593	1.0167	1.0167
#1	2.9734	.00045	.01044	-.00065	1.5966	-.00740	.00268	2.2338	4.7803
#2	2.9113	.00070	.00636	.00133	1.6144	-.00302	.00104	2.2019	4.7120
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.02955	.00229	-.00013	-.00142	-.03019	.00041	.00008	-.00098
Stddev	.00027	.00035	.00358	.00018	.00045	.04880	.00013	.00011	.00169
%RSD	56.555	1.1712	156.11	132.90	31.735	161.63	31.835	135.55	173.09
#1	-.00029	.02979	.00483	-.00026	-.00174	-.06470	.00051	.00016	.00022
#2	-.00068	.02930	-.00024	-.00001	-.00110	.00431	.00032	.00000	-.00217
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3096.2	54439.	6459.5						
Stddev	4.8	88.	75.8						
%RSD	.15373	.16224	1.1741						
#1	3099.6	54376.	6405.9						
#2	3092.8	54501.	6513.1						

Sample Name: 280-69748-A-4-E MS Acquired: 5/30/2015 21:19:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04356	1.9573	.99753	1.0470	1.9969	.04699	F 1.9885	65.802	.10187
Stddev	.00046	.0006	.00028	.0012	.0139	.00036	.0064	.495	.00036
%RSD	1.0594	.03227	.02810	.11042	.69443	.77599	.32346	.75213	.35680
#1	.04389	1.9569	.99773	1.0461	2.0067	.04724	1.9930	66.152	.10213
#2	.04323	1.9578	.99734	1.0478	1.9871	.04673	1.9839	65.452	.10162
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48373	W .19956	.24397	.99330	49.110	.97258	51.277	.49307	1.0133
Stddev	.00079	.00041	.00045	.00646	.196	.00307	.235	.00014	.0007
%RSD	.16228	.20732	.18335	.64994	.39875	.31571	.45737	.02811	.06809
#1	.48428	.19927	.24428	.99787	49.248	.97475	51.443	.49317	1.0128
#2	.48317	.19986	.24365	.98874	48.971	.97041	51.111	.49297	1.0138
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	65.913	.47814	W 10.582	.48679	9.7013	.52380	2.0382	19.997	42.793
Stddev	.874	.00157	.005	.00045	.0248	.00143	.0178	.333	.714
%RSD	1.3264	.32749	.04550	.09151	.25511	.27210	.87543	1.6677	1.6677
#1	66.531	.47703	10.579	.48711	9.7188	.52480	2.0508	20.232	43.297
#2	65.295	.47925	10.585	.48648	9.6838	.52279	2.0256	19.761	42.288
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.1.0000							
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9748	1.0911	.99291	.98603	1.9600	2.0305	.50422	.47128	.44385
Stddev	.0113	.0075	.00071	.00066	.0130	.0018	.00113	.00284	.01066
%RSD	.57064	.69109	.07176	.06743	.66193	.08712	.22407	.60302	2.4015
#1	1.9828	1.0964	.99341	.98650	1.9692	2.0318	.50502	.46927	.45139
#2	1.9668	1.0857	.99241	.98556	1.9509	2.0293	.50342	.47329	.43632
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3027.6	52992.	6499.0						
Stddev	3.7	56.	34.3						
%RSD	.12353	.10585	.52811						
#1	3030.2	53032.	6474.8						
#2	3024.9	52953.	6523.3						

Sample Name: 280-69748-A-4-F MSD Acquired: 5/30/2015 21:21:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04416	1.9845	1.0221	1.0662	2.0235	.04763	2.0105	66.490	.10273
#2	.04404	1.9720	1.0116	1.0649	2.0382	.04777	2.0066	66.883	.10277
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49053	.19882	.25102	.93203	49.577	.98211	52.519	.50397	1.0337
#2	.48992	.19764	.25086	.93586	49.910	.98966	52.466	.50373	1.0303
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	65.607	.48407	10.665	.49000	9.8597	.52609	2.0390	19.870	42.521
#2	66.886	.48354	10.609	.48928	9.8048	.52123	2.0353	20.373	43.598
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9900	1.1043	1.0180	1.0159	1.9620	2.0911	.51694	.47965	.44622
#2	1.9835	1.1128	1.0193	1.0181	1.9638	2.1375	.51954	.48213	.45128
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2982.3	51785.	6513.8						
#2	2981.4	51868.	6435.0						

Sample Name: 280-69748-A-5-B Acquired: 5/30/2015 21:24:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.00276	.00290	.00687	.08786	.00012	.00096	31.304	.00013
Stddev	.00003	.00008	.00178	.00013	.00060	.00002	.00081	.072	.00016
%RSD	4.9724	3.0562	61.305	1.9378	.68238	18.573	84.197	.22973	127.04
#1	-.00060	.00270	-.00415	.00696	.08743	.00010	-.00154	31.253	.00024
#2	-.00065	.00282	-.00164	.00677	.08828	.00013	-.00039	31.355	.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.00038	-.00084	.00290	.44094	.00560	6.6593	.00041	-.00072
Stddev	.00015	.00015	.00014	.00021	.00337	.00089	.0434	.00005	.00006
%RSD	306.37	39.303	17.129	7.3309	.76469	15.974	.65192	11.763	8.0804
#1	-.00016	.00049	-.00074	.00305	.44333	.00623	6.6900	.00045	-.00076
#2	.00006	.00028	-.00095	.00275	.43856	.00497	6.6286	.00038	-.00068
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.105	.00324	.00790	.00296	11.944	-.00159	-.00058	8.0872	17.307
Stddev	.271	.00007	.00082	.00108	.129	.00020	.00094	.1297	.278
%RSD	1.4179	2.2737	10.397	36.457	1.0811	12.348	163.38	1.6035	1.6035
#1	18.914	.00318	.00848	.00372	12.036	-.00173	-.00124	7.9955	17.110
#2	19.297	.00329	.00732	.00220	11.853	-.00145	.00009	8.1789	17.503
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.18582	.00241	.00017	-.00419	-.02637	.00033	.00150	.00212
Stddev	.00008	.00089	.00014	.00005	.00066	.03172	.00018	.00002	.00011
%RSD	6.2048	.47827	5.6258	27.124	15.688	120.28	55.322	1.1013	4.9787
#1	.00140	.18519	.00250	.00014	-.00372	-.00394	.00046	.00148	.00204
#2	.00128	.18644	.00231	.00021	-.00465	-.04880	.00020	.00151	.00219
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3235.3	57819.	7299.8						
Stddev	3.0	214.	9.9						
%RSD	.09411	.37040	.13583						
#1	3233.2	57667.	7306.9						
#2	3237.5	57970.	7292.8						

Sample Name: 280-69748-A-6-B Acquired: 5/30/2015 21:26:50 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.06436	-.00139	.01962	.06258	.00009	-.00197	22.637	.00011
Stddev	.00054	.00123	.00125	.00066	.00048	.00005	.00026	.149	.00001
%RSD	115.50	1.9057	89.986	3.3820	.76997	55.491	13.099	.65641	11.709
#1	-.00009	.06349	-.00050	.01916	.06292	.00012	-.00215	22.742	.00010
#2	-.00085	.06523	-.00227	.02009	.06224	.00005	-.00179	22.531	.00012
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.00036	-.00078	.03557	.45581	.00426	4.6479	.00031	-.00080
Stddev	.00005	.00002	.00009	.00172	.04568	.00049	.0665	.00001	.00043
%RSD	93.959	4.6519	11.983	4.8367	10.021	11.410	1.4301	3.4273	54.010
#1	-.00002	.00035	-.00084	.03435	.42351	.00460	4.6009	.00030	-.00111
#2	-.00009	.00038	-.00071	.03678	.48811	.00391	4.6949	.00031	-.00050
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.967	.00197	.00888	.00152	10.246	-.00068	.00289	7.8276	16.751
Stddev	.063	.00094	.00252	.00059	.106	.00049	.00154	.0191	.041
%RSD	.45098	47.990	28.435	38.836	1.0393	72.315	53.200	.24348	.24348
#1	13.923	.00130	.01066	.00110	10.170	-.00033	.00180	7.8411	16.780
#2	14.012	.00264	.00709	.00194	10.321	-.00103	.00398	7.8142	16.722
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00147	.12359	.00304	.00130	-.00567	-.01360	.00033	.00099	.00160
Stddev	.00073	.00082	.00164	.00022	.00073	.00229	.00025	.00018	.00016
%RSD	49.762	.66382	53.808	17.013	12.842	16.846	74.985	18.581	9.9585
#1	.00095	.12417	.00420	.00114	-.00619	-.01198	.00050	.00086	.00171
#2	.00198	.12301	.00188	.00146	-.00516	-.01522	.00015	.00112	.00149
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	3244.5	58461.	7343.1						
Stddev	19.8	374.	3.0						
%RSD	.60879	.64039	.04113						
#1	3258.5	58726.	7340.9						
#2	3230.5	58196.	7345.2						

Sample Name: 280-69748-A-7-B Acquired: 5/30/2015 21:29:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00019	As1890 ppm .00389	B_2089 ppm .00311	Ba4554 ppm .03536	Be3130 ppm .11043	Bi2230 ppm .00005	Ca3179 ppm 92.296	Cd2288 ppm .00010
#1	-.00058	.00443	-.00209	.03548	.10976	.00005	.00024	92.168	.00005
#2	.00020	.00336	-.00414	.03524	.11110	.00006	-.00003	92.425	.00015
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00006	Cu3247 ppm .00155	Fe2599 ppm .00014	K_7664 ppm .02624	Li6707 ppm 2.5088	Mg2790 ppm .07607	Mn2576 ppm 18.580	Mo2020 ppm .01024
#1	-.00008	.00154	-.00006	.02486	2.5014	.07626	18.577	.01024	.00019
#2	-.00004	.00156	.00035	.02761	2.5162	.07587	18.583	.01023	-.00081
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 65.494	P_1782 ppm .00263	Pb2203 ppm .02697	S_1820 ppm .00454	Sb2068 ppm 22.090	Se1960 ppm .00080	Si2881 ppm .00685	SiO2 ppm 8.5567
#1	65.810	.00279	.02767	.00524	22.019	.00095	.00771	8.5546	18.307
#2	65.177	.00246	.02626	.00385	22.161	.00065	.00598	8.5588	18.316
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00135	Th2837 ppm .65352	Ti3349 ppm .00109	Tl1908 ppm .00019	U_3701 ppm -.00797	V_2924 ppm .02141	Zn2062 ppm -.00047	Zr3391 ppm .00159
#1	.00167	.65279	.00145	.00018	-.00900	.01255	-.00030	.00169	.00430
#2	.00103	.65425	.00073	.00021	-.00694	.03026	-.00064	.00148	.00152
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3165.9	Y_3774 Cts/S 56929.	377.433 {89}	7303.7	76.0	58.493	50.975	9.5493
#1	3174.8	57068.	7357.4						67.635
#2	3157.0	56790.	7249.9						

Sample Name: 280-69748-A-8-B Acquired: 5/30/2015 21:32:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00429	.00209	.12048	.08026	.00001	.00004	.99.542	.00007
Stddev	.00056	.00037	.00061	.00139	.00046	.00014	.00191	.674	.00012
%RSD	515.93	8.5320	29.035	1.1536	.56783	1064.4	4535.9	.67673	177.70
#1	-.00050	.00455	-.00251	.12146	.08058	-.00011	-.00131	100.02	-.00002
#2	.00029	.00403	-.00166	.11950	.07993	.00009	.00139	99.066	.00015
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.00027	.00101	.00646	3.2530	.23912	.30.169	.03230	-.00144
Stddev	.00033	.00008	.00028	.00077	.0105	.00109	.200	.00016	.00032
%RSD	272.70	28.951	27.242	11.840	.32351	.45439	.66400	.48319	22.437
#1	.00011	.00022	.00082	.00592	3.2455	.23988	30.311	.03219	-.00121
#2	-.00036	.00033	.00120	.00701	3.2604	.23835	30.027	.03241	-.00167
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	190.49	.00520	.01282	.00320	56.902	.00008	.00160	6.8442	14.647
Stddev	1.20	.00016	.00289	.00006	.062	.00004	.00031	.0394	.084
%RSD	.62788	3.0747	22.565	1.8841	.10834	48.705	19.540	.57560	.57560
#1	191.34	.00509	.01487	.00325	56.859	.00011	.00182	6.8721	14.706
#2	189.65	.00531	.01078	.00316	56.946	.00005	.00138	6.8164	14.587
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00225	1.0327	.00088	.00000	-.00635	.00739	-.00111	.00475	.00241
Stddev	.00060	.0064	.00189	.00010	.00260	.00938	.00004	.00029	.00122
%RSD	26.667	.62383	214.59	3109.3	40.965	126.91	3.2075	6.0602	50.768
#1	.00183	1.0372	.00222	-.00007	-.00819	.01402	-.00108	.00495	.00154
#2	.00267	1.0281	-.00046	.00008	-.00451	.00076	-.00113	.00455	.00327
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3008.7	55042.	7144.7						
Stddev	12.7	173.	45.4						
%RSD	.42085	.31398	.63480						
#1	2999.8	55165.	7112.6						
#2	3017.7	54920.	7176.7						

Sample Name: 280-69748-A-9-B Acquired: 5/30/2015 21:34:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00008	As1890 ppm .00296	B_2089 ppm .00151	Ba4554 ppm .05986	Be3130 ppm .03499	Bi2230 ppm -.00004	Ca3179 ppm .00112	Cd2288 ppm 193.13
#1	.00022	.00294	-.00218	.05948	.03455	-.00004	.00285	191.09	-.00014
#2	-.00038	.00297	.00519	.06025	.03543	-.00003	-.00062	195.17	-.00030
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00013	Cu3247 ppm .00085	Fe2599 ppm .00145	K_7664 ppm .01492	Li6707 ppm 3.9354	Mg2790 ppm .25791	Mn2576 ppm 51.771	Mo2020 ppm .00991
#1	-.00037	.00102	.00115	.01359	3.9097	.25414	51.706	.01003	.00215
#2	.00011	.00068	.00174	.01624	3.9612	.26168	51.836	.00980	.00259
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 153.90	P_1782 ppm .00460	Pb2203 ppm .01392	S_1820 ppm .00288	Sb2068 ppm 167.00	Se1960 ppm .00072	Si2881 ppm 36690	SiO2 ppm 8.0972
#1	152.21	.00445	.01556	.00214	166.19	.00106	.36031	7.9882	17.095
#2	155.59	.00475	.01228	.00362	167.80	.00039	.37349	8.2062	17.561
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00032	Th2837 ppm 1.7958	Ti3349 ppm .00292	Tl1908 ppm -.00016	U_3701 ppm -.00785	V_2924 ppm .07333	Zn2062 ppm -.00070	Zr3391 ppm .00157
#1	.00089	1.7755	.00340	-.00044	-.00598	.05108	-.00104	.00185	.00148
#2	-.00025	1.8161	.00244	.00013	-.00973	.09559	-.00036	.00130	.00290
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3018.9	Y_3774 Cts/S 53510.	377.433 {89}					
#1	3013.5	53664.	6706.2						
#2	3024.3	53355.	6656.7						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 21:37:25 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-00748	48.538	-00307	.00070	.00061	.00007	1.0405	.05154	-00023	-00005	.00100
Stddev	.00015	.017	.00453	.00065	.00025	.00002	.0022	.00546	.00020	.00000	.00020
%RSD	1.9707	.03501	147.65	93.133	40.686	37.041	.20926	10.589	87.452	6.8388	19.640
#1	-.00737	48.526	-.00627	.00117	.00044	.00005	1.0420	.05540	-.00036	-.00005	.00086
#2	-.00758	48.550	.00014	.00024	.00079	.00008	1.0389	.04768	-.00009	-.00005	.00113
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00101	48.055	.05917	-.00086	.05285	-.00168	-.00043	245.82	.00182	.00688	.00020
Stddev	.00040	.567	.00863	.00049	.00344	.00007	.00003	.01	.00007	.00158	.00015
%RSD	39.552	1.1807	14.590	56.760	6.5028	4.2714	7.4688	.00240	3.8915	22.928	75.668
#1	-.00129	48.456	.06528	-.00121	.05042	-.00163	-.00041	245.81	.00188	.00577	.00031
#2	-.00073	47.654	.05307	-.00052	.05528	-.00173	-.00045	245.82	.00177	.00800	.00009
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0908	-.01241	.00720	-.05167	-.11057	-.00027	.00058	4.9612	-.01182	.00107	W 10.574
Stddev	.0017	.00099	.00041	.02219	.04748	.00014	.00009	.0053	.00027	.00059	.001
%RSD	.03383	7.9610	5.6896	42.940	42.940	52.482	15.674	.10681	2.2561	54.671	.00642
#1	5.0895	-.01171	.00749	-.03598	-.07700	-.00017	.00064	4.9649	-.01163	.00066	10.574
#2	5.0920	-.01311	.00691	-.06736	-.14415	-.00036	.00051	4.9574	-.01201	.00149	10.574
Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value Range											10.000 5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00278	-.00052	-.13027								
Stddev	.00027	.00062	.00043								
%RSD	9.8532	120.48	.32916								
#1	.00298	-.00008	-.13057								
#2	.00259	-.00096	-.12996								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3062.5	53478.	6645.7								
Stddev	2.0	134.	55.7								
%RSD	.06468	.25110	.83789								
#1	3061.1	53573.	6606.3								
#2	3063.9	53383.	6685.1								

Sample Name: CCV-3296664 Acquired: 5/30/2015 21:40:04 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49601	.54265	1.0133	.53295	.48805	.47631	-.00260	4.7892	.51840	.51251	.52524	.50251	2.3913
Stddev	.00014	.00274	.0039	.00186	.00769	.00662	.00031	.0604	.00022	.00200	.00204	.00018	.0211
%RSD	.02762	.50557	.38904	.34854	1.5764	1.3904	11.767	1.2603	.04232	.38928	.38766	.03591	.88411
#1	.49591	.54459	1.0105	.53164	.48261	.47163	-.00282	4.7465	.51855	.51392	.52668	.50239	2.3764
#2	.49611	.54071	1.0161	.53427	.49349	.48099	-.00239	4.8319	.51824	.51110	.52380	.50264	2.4063
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	48.476	.97993	19.417	.50175	.50260	5.1039	.50506	1.0606	1.0075	.02006	1.0500	1.0258	4.7010
Stddev	.862	.02107	.080	.00339	.00296	.0694	.00343	.0108	.0068	.00804	.0073	.0012	.0517
%RSD	1.7774	2.1502	.41134	.67654	.58906	1.3600	.67863	1.0175	.67534	40.076	.69553	.11396	1.1005
#1	47.867	.96503	19.473	.50416	.50470	5.0548	.50748	1.0682	1.0123	.02575	1.0551	1.0267	4.6644
#2	49.085	.99483	19.360	.49935	.50051	5.1530	.50263	1.0530	1.0026	.01438	1.0448	1.0250	4.7375
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	10.060	1.0109	.48709	.00123	.50115	1.0380	-.03062	.51423	.48601	.47607			
Stddev	.111	.0039	.00732	.00003	.00315	.0047	.00181	.00348	.00499	.00369			
%RSD	1.1005	.38306	1.5021	2.1541	.62864	.45430	5.9032	.67691	1.0267	.77504			
#1	9.9818	1.0136	.48191	.00122	.50338	1.0413	-.03190	.51669	.48954	.47347			
#2	10.138	1.0082	.49226	.00125	.49892	1.0347	-.02934	.51177	.48248	.47868			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass		
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3082.5	53839.	6590.1										
Stddev	3.5	476.	101.9										
%RSD	.11367	.88379	1.5466										
#1	3080.0	53503.	6662.2										
#2	3085.0	54176.	6518.1										

Sample Name: CCB Acquired: 5/30/2015 21:42:32 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00010	.00074	-.00105	.00160	.00012	.00002	.00141	.00063	-.00019	.00009	-.00004	-.00101	.00249
Stddev	.00064	.00011	.00219	.00036	.00036	.00010	.00053	.00002	.00006	.00031	.00012	.00033	.00083
%RSD	633.18	14.166	207.95	22.742	307.02	529.02	37.638	3.2133	32.261	337.85	321.01	32.662	33.358
#1	.00055	.00067	.00050	.00134	.00037	.00009	.00179	.00065	-.00015	-.00013	.00005	-.00125	.00308
#2	-.00035	.00082	-.00260	.00186	-.00014	-.00005	.00104	.00062	-.00023	.00031	-.00013	-.00078	.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.00037	-.00231	.00040	.00003	.00015	.11588	.00006	.00056	-.00026	.01571	-.00290	.00186	-.01658
Stddev	.03527	.00093	.01013	.00013	.00035	.00578	.00036	.00074	.00047	.00213	.00067	.00058	.00688
%RSD	9411.0	40.418	2518.7	522.93	240.25	4.9905	639.13	132.02	179.10	13.569	23.150	31.149	41.483
#1	-.02456	-.00165	-.00676	-.00007	.00039	.11997	.00031	.00108	.00007	.01420	-.00243	.00227	-.01172
#2	.02531	-.00297	.00757	.00012	-.00010	.11179	-.00020	.00004	-.00059	.01721	-.00338	.00145	-.02144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.03548	.00079	.00015	.00226	.00045	-.00118	-.01730	-.00024	.00023	.00062			
Stddev	.01472	.00093	.00001	.00177	.00020	.00322	.00078	.00011	.00041	.00124			
%RSD	41.483	117.61	10.184	78.387	45.141	273.35	4.4997	45.718	177.83	199.65			
#1	-.02507	.00013	.00016	.00351	.00060	.00110	-.01785	-.00016	.00052	-.00026			
#2	-.04589	.00145	.00014	.00101	.00031	-.00346	-.01675	-.00031	-.00006	.00149			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3103.5	54720.	6551.6										
Stddev	5.5	165.	91.6										
%RSD	.17670	.30123	1.3982										
#1	3099.6	54604.	6616.4										
#2	3107.4	54837.	6486.8										

Sample Name: CCVL3301032II Acquired: 5/30/2015 21:44:55 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00921	.10825	.01794	.10634	.00991	.00095	.10537	.20193	.00516	.01035	.01086	.01483	.09717	3.0492
Stddev	.00014	.00002	.00503	.00005	.00035	.00011	.00371	.00357	.00014	.00014	.00037	.00011	.00186	.0093
%RSD	1.5642	.01883	28.018	.04374	3.5668	11.103	3.5209	1.7666	2.7560	1.3889	3.4134	.76677	1.9109	.30360
#1														
#2														

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00896	.20555	.01041	.01963	1.1316	.04115	3.0673	.00829	.01839	.00833	.01555	.45350	.97049	.10477
Stddev	.00156	.00427	.00017	.00004	.0087	.00021	.0020	.00074	.00193	.00303	.00008	.01581	.03382	.00136
%RSD	17.407	2.0784	1.6655	.18669	.76990	.51483	.06648	8.9125	10.479	36.351	.54331	3.4853	3.4853	1.2997
#1														
#2														

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01017	.01692	.01037	.01579	.04834	.01040	.02157	.01475
Stddev	.00009	.00004	.00021	.00247	.00531	.00027	.00002	.00032
%RSD	.84396	.21910	2.0219	15.646	10.994	2.5600	.09028	2.1602
#1								
#2								

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3120.3	54747.	6561.4
Stddev	14.5	391.	8.9
%RSD	.46408	.71442	.13622
#1	3130.6	55023.	6567.8
#2	3110.1	54470.	6555.1

Sample Name: MB 280-279392/1-A Acquired: 5/30/2015 21:47:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00012	.00228	-.00297	.00131	-.00005	-.00007	-.00148	.01820	.00007
#2	-.00003	.00289	.00226	.00144	-.00023	.00012	-.00421	.01679	-.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00017	-.00023	.01099	.00446	-.01281	-.00310	-.00063	.00009	.00026
#2	.00003	-.00031	.01144	.00618	.00574	-.00170	.00190	.00020	.00015
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .00750 -.00750	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.08451	-.00020	.00267	-.00059	.01551	-.00015	.00413	-.02481	-.05310
#2	.00621	.00002	.00108	.00288	.00151	.00304	.00019	.00299	.00640
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00007	.00002	.00237	.00023	.00146	-.01934	-.00038	.00233	.00067
#2	.00201	.00014	.00197	-.00008	-.00037	-.04046	.00058	.00201	.00342
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3147.5	55776.	6716.6						
#2	3154.4	55521.	6698.9						

Sample Name: LCS 280-279392/2-A Acquired: 5/30/2015 21:49:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04523	2.0427	1.0451	1.1036	1.9815	.04796	2.1037	47.139	.10656
#2	.04540	2.0326	1.0379	1.0929	2.0134	.04953	2.0889	47.886	.10613
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.50595	.20634	.25463	.93691	49.696	1.0006	48.704	.50528	1.0635
#2	.50591	.20604	.25641	.97489	50.516	1.0161	48.863	.50517	1.0594
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	53.460	.49942	11.035	.50893	2.1737	.55822	2.1756	9.6327	20.614
#2	54.177	.49799	10.850	.50902	2.1606	.55354	2.1776	9.8372	21.052
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .55499 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0793	.99029	1.0223	1.0217	2.0983	2.0722	.51720	.48016	.45995
#2	2.0849	1.0062	1.0244	1.0240	2.1000	2.0869	.51799	.47987	.46796
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3031.4	53325.	6644.8						
#2	3035.5	53555.	6582.0						

Sample Name: 280-69723-D-1-E Acquired: 5/30/2015 21:52:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.00174	2.1899	3.3429	.01018	.00599	1.6129	.02445	-.02311	111.45
#2	.00202	2.1879	3.3597	.01104	.00668	1.6237	.02483	-.03036	112.22
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}	Mn2576 257.610 {131}
#1	.00094	.02756	.00523	.04526	1081.4	2.5341	.02012	40.642	4.3749
#2	.00096	.02731	.00452	.04653	1088.7	2.5559	.01984	40.802	4.4058
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 40.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	-.00344	4.5937	.08847	4.5529	.01746	11.623	-.10704	.02280	62.115
#2	-.00393	4.6096	.08743	4.4952	.01629	11.483	-.10310	.01861	62.469
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Fail 50.000 -.02000	Chk Pass	Chk Warn 50.000 -.10000
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	132.93	.01078	.30748	.11661	.10471	-.00086	-.74081	.00584	.05472
#2	133.68	.01154	.30915	.12263	.10642	.00037	-.77319	.00594	.05700
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	-.00574								
#2	-.00718								
Check ? High Limit Low Limit		Chk Pass							

Sample Name: 280-69723-D-1-E Acquired: 5/30/2015 21:52:24 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279392 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3002.2	53074.	6736.7
Stddev	3.9	118.	45.5
%RSD	.12979	.22287	.67486
#1	3004.9	53157.	6768.9
#2	2999.4	52990.	6704.6

Sample Name: 280-69723-D-1-E SD@5 Acquired: 5/30/2015 21:55:22 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00023	.53807	.00519	.00360	.33557	.00517	-.00765	23.572	.00015
#2	.00055	.53209	.00222	.00254	.33664	.00514	-.00638	23.768	.00003
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00564	.00112	.00909	231.37	.46329	.00347	8.9275	.92887	-.00103
#2	.00589	.00087	.00891	232.62	.47313	.00218	8.9201	.93140	-.00122
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.95663	.02014	.93164	.00676	2.3615	-.02492	-.00183	13.269	28.397
#2	.95315	.01995	.93269	.00567	2.3866	-.02267	.00615	13.388	28.650
Check ? High Limit Low Limit	Chk Pass	Chk Fail 50.000 -.02000	Chk Pass	Chk Pass	Chk Pass				
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00157	.06593	.02981	.02195	.00222	-.17855	.00125	.01311	.00106
#2	.00217	.06616	.03204	.02199	-.00198	-.17058	.00089	.01228	-.00181
Check ? High Limit Low Limit	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3103.5	54081.	6621.4						
#2	3109.5	54073.	6527.1						

Sample Name: 280-69723-D-1-F MS Acquired: 5/30/2015 21:58:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04866	12.619	1.0565	1.0420	3.6160	.07195	2.0941	160.53	.10948
#2	.04759	12.868	1.0393	1.0366	3.6861	.07371	2.0680	163.24	.10871
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.52154	.20281	.31189	1106.8	52.995	1.0265	90.426	4.9085	1.0374
#2	.51909	.20167	.31289	1128.2	53.838	1.0441	90.638	4.9171	1.0328
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Warn 500.00 40.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	58.294	.57001	15.102	.50089	14.161	.41269	2.1018	74.459	159.34
#2	59.311	.56736	15.036	.48881	13.996	.40375	2.0950	75.682	161.96
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9804	1.2935	1.1227	1.1062	1.8833	1.3757	.52035	.51677	.46624
#2	1.9534	1.3192	1.1107	1.1086	1.8714	1.3872	.52071	.52228	.47994
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2934.5	51900.	6619.3						
#2	2926.8	51701.	6565.9						

Sample Name: 280-69723-D-1-G MSD Acquired: 5/30/2015 22:00:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04808	12.657	1.0465	1.0435	3.7407	.07462	2.0882	164.97	.10963
#2	.04904	12.390	1.0544	1.0388	3.6742	.07317	2.0856	161.69	.10935
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.52094	.20310	.31437	1131.9	55.033	1.0716	90.815	4.7867	1.0387
#2	.52117	.20348	.31424	1110.3	54.128	1.0482	90.684	4.7961	1.0391
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Warn 500.00 40.000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	60.387	.56907	15.029	.49629	13.891	.40749	2.1253	80.535	172.34
#2	60.022	.56985	14.972	.49507	13.892	.41370	2.1395	78.698	168.41
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9838	1.3449	1.1211	1.1107	1.9083	1.4342	.52531	.52689	.48832
#2	2.0124	1.3210	1.1376	1.1097	1.9293	1.4527	.52486	.52674	.47316
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2920.6	51344.	6439.7						
#2	2922.6	51073.	6518.4						

Sample Name: 280-69723-D-2-C Acquired: 5/30/2015 22:04:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	.04902	-.00011	.01980	.02676	-.00004	-.00006	50.164	.00018
Stddev	.00010	.00210	.00329	.00015	.00021	.00005	.00197	.029	.00012
%RSD	45.418	4.2841	3031.1	.73312	.79248	145.46	3402.5	.05803	65.055
#1	-.00030	.05051	-.00243	.01990	.02661	.00000	-.00145	50.185	.00026
#2	-.00015	.04754	.00222	.01970	.02691	-.00007	.00134	50.144	.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00376	.00053	-.00017	.30903	1.3792	.03915	23.354	.73619	-.00133
Stddev	.00026	.00032	.00002	.00069	.0309	.00057	.004	.00029	.00020
%RSD	7.0256	60.231	9.6584	.22262	2.2423	1.4544	.01716	.03873	15.448
#1	.00357	.00031	-.00016	.30855	1.3574	.03875	23.357	.73639	-.00118
#2	.00395	.00076	-.00018	.30952	1.4011	.03955	23.351	.73599	-.00147
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.6224	.00785	.04007	.00383	13.207	-.00364	.00515	5.5784	11.938
Stddev	.0081	.00003	.00086	.00051	.045	.00065	.00090	.1056	.226
%RSD	.14396	.32151	2.1468	13.182	.34191	17.957	17.513	1.8928	1.8928
#1	5.6282	.00786	.04067	.00419	13.175	-.00410	.00578	5.5038	11.778
#2	5.6167	.00783	.03946	.00348	13.239	-.00318	.00451	5.6531	12.098
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.06423	.00113	.00057	-.00622	-.04189	-.00034	.00124	.00093
Stddev	.00024	.00081	.00026	.00012	.00045	.00970	.00020	.00034	.00153
%RSD	85.214	1.2533	22.690	21.896	7.2908	23.159	59.557	27.056	163.87
#1	-.00011	.06366	.00131	.00066	-.00654	-.03503	-.00020	.00148	-.00015
#2	-.00045	.06480	.00095	.00048	-.00590	-.04875	-.00048	.00100	.00202
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3279.2	57028.	6850.7						
Stddev	3.6	44.	29.4						
%RSD	.10863	.07729	.42935						
#1	3276.6	56997.	6871.5						
#2	3281.7	57060.	6829.9						

Sample Name: 280-69723-D-3-C Acquired: 5/30/2015 22:07:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00047	.03000	-.00082	.03025	.06608	.00004	-.00012	91.051	.00003
#2	.00043	.02734	.00242	.03062	.06610	.00006	.00251	91.268	-.00017
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	10.025	11.085	.00331	.01373	.00182	24.947	-.00286	.00485	4.0382
#2	10.070	11.405	.00395	.01221	.00313	24.536	-.00162	.00491	4.0892
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	8.6418	.00107	.11804	.00516	.00095	-.00683	-.02233	.00007	.00069
#2	8.7509	.00029	.11881	.00276	.00070	-.00737	-.01741	.00004	-.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	.00286								
#2	-.00088								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69723-D-3-C Acquired: 5/30/2015 22:07:03 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279392 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3118.3	54648.	6591.7
Stddev	16.0	8.	18.8
%RSD	.51393	.01485	.28486
#1	3129.7	54654.	6605.0
#2	3107.0	54643.	6578.4

Sample Name: 280-69723-D-4-C Acquired: 5/30/2015 22:09:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00011	.00101	-.00622	.03227	.06968	-.00014	-.00042	111.85	-.00001
#2	.00039	.00150	-.00024	.03302	.06748	-.00011	.00212	109.43	-.00015
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00027	.00069	-.00022	2.0248	4.3312	.06974	23.609	.03596	-.00211
#2	.00020	.00057	-.00040	1.8864	4.2064	.07018	23.705	.03608	-.00241
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	10.100	11.421	.00322	.00217	.00563	31.269	.00091	-.00057	3.9806
#2	9.8847	11.012	.00269	.00108	.00312	31.501	-.00102	-.00033	3.9519
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	8.5185	.00255	.12677	.00059	.00003	-.01022	-.03699	-.00077	.00140
#2	8.4570	-.00037	.12370	.00438	.00007	-.00911	-.06106	-.00080	.00124
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	.00157								
#2	-.00049								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69723-D-4-C Acquired: 5/30/2015 22:09:41 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279392 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3084.8	54188.	6497.4
Stddev	27.8	224.	108.2
%RSD	.90210	.41375	1.6654
#1	3104.4	54347.	6420.9
#2	3065.1	54030.	6573.9

Sample Name: 280-69723-D-5-C Acquired: 5/30/2015 22:12:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	.00133	-.00259	.02477	.03848	-.00005	.00058	74.218	-.00007
Stddev	.00031	.00025	.00358	.00078	.00017	.00003	.00013	.088	.00006
%RSD	139.88	18.624	138.29	3.1314	.45348	64.199	22.236	.11807	93.865
#1	-.00045	.00115	-.00006	.02532	.03860	-.00003	.00049	74.280	-.00002
#2	.00000	.00150	-.00511	.02422	.03835	-.00007	.00068	74.156	-.00011
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00069	-.00050	.23155	2.3938	.05781	33.690	.01459	-.00189
Stddev	.00037	.00011	.00027	.00337	.0337	.00108	.060	.00011	.00035
%RSD	862.74	15.320	54.635	1.4541	1.4087	1.8605	.17938	.74158	18.257
#1	.00030	.00077	-.00069	.22917	2.3699	.05857	33.647	.01451	-.00214
#2	-.00022	.00062	-.00031	.23393	2.4176	.05705	33.733	.01466	-.00165
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.4316	.00285	.00350	.00401	29.226	-.00167	.00126	3.7968	8.1251
Stddev	.0082	.00026	.00068	.00182	.058	.00319	.00072	.0195	.0418
%RSD	.11012	9.2051	19.354	45.397	.19711	190.55	56.823	.51465	.51465
#1	7.4258	.00267	.00398	.00530	29.267	-.00393	.00177	3.7830	8.0956
#2	7.4374	.00304	.00302	.00272	29.185	.00058	.00076	3.8106	8.1547
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00155	.07938	.00129	.00024	-.00720	-.03895	-.00025	.00016	.00096
Stddev	.00024	.00042	.00057	.00007	.00028	.01688	.00009	.00047	.00086
%RSD	15.587	.52722	44.357	27.461	3.8289	43.338	37.815	289.93	89.653
#1	.00138	.07908	.00169	.00019	-.00740	-.02701	-.00018	-.00017	.00158
#2	.00172	.07967	.00088	.00029	-.00701	-.05088	-.00032	.00050	.00035
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3079.8	54293.	6649.2						
Stddev	16.9	100.	12.0						
%RSD	.54870	.18397	.18087						
#1	3067.8	54223.	6657.7						
#2	3091.7	54364.	6640.7						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 22:14:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-00738	49.164	.00126	.00171	.00048	-0.00005	1.0450	.04889	-0.00032	.00002	.00069
Stddev	.00031	.184	.00025	.00006	.00006	.00007	.0066	.00552	.00004	.00005	.00051
%RSD	4.1497	.37408	19.956	3.2498	12.698	125.29	.63338	11.291	13.321	222.06	73.132
#1	-.00760	49.034	.00108	.00167	.00044	-.00001	1.0497	.05279	-.00029	-.00001	.00105
#2	-.00716	49.294	.00144	.00175	.00053	-.00010	1.0403	.04498	-.00035	.00006	.00033
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00070	49.032	-.07164	.00079	.05398	-.00159	-.00010	249.40	.00232	.00801	.00009
Stddev	.00045	.751	.00606	.00016	.00302	.00001	.00021	.50	.00030	.00033	.00079
%RSD	64.456	1.5312	8.4657	20.058	5.5959	.70531	212.93	.19978	12.985	4.1448	840.61
#1	-.00038	48.501	-.06735	.00068	.05612	-.00159	.00005	249.05	.00211	.00825	-.00046
#2	-.00102	49.563	-.07593	.00090	.05184	-.00158	-.00024	249.75	.00253	.00778	.00065
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1191	-.01134	.00598	-.03178	-.06800	-.00165	.00042	5.0122	-.01243	.00106	W 10.674
Stddev	.0166	.00262	.00117	.00557	.01193	.00016	.00005	.0159	.00010	.00021	.001
%RSD	.32505	23.080	19.525	17.543	17.543	9.6591	12.927	.31784	.81213	20.118	.00823
#1	5.1308	-.01319	.00515	-.02784	-.05957	-.00154	.00038	5.0009	-.01250	.00091	10.674
#2	5.1073	-.00949	.00680	-.03572	-.07644	-.00177	.00045	5.0234	-.01236	.00122	10.673
Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value Range											10.000 5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00246	-.00014	-.12932								
Stddev	.00028	.00006	.00051								
%RSD	11.239	45.222	.39106								
#1	.00226	-.00019	-.12896								
#2	.00266	-.00010	-.12968								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3033.4	52617.	6399.4								
Stddev	2.7	203.	15.7								
%RSD	.08801	.38542	.24574								
#1	3035.3	52761.	6410.5								
#2	3031.5	52474.	6388.3								

Sample Name: CCV-3296664 Acquired: 5/30/2015 22:17:40 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49980	Al1670 ppm F .55563	As1890 ppm 1.0286	B_2089 ppm .53135	Ba4554 ppm .49611	Be3130 ppm .48447	Bi2230 ppm .00161	Ca3179 ppm 4.8997	Cd2288 ppm .52329	Co2286 ppm .51437	Cr2055 ppm .52523	Cu3247 ppm .50673
#1	.50226	.55578	1.0322	.53118	.49951	.48738	.00170	4.9281	.52342	.51320	.52647	.50763
#2	.49734	.55549	1.0250	.53153	.49270	.48156	.00153	4.8712	.52316	.51554	.52399	.50582
Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm 2.4547	K_7664 ppm 49.358	Li6707 ppm .99646	Mg2790 ppm 19.765	Mn2576 ppm .51316	Mo2020 ppm .50505	Na5895 ppm 5.1425	Ni2316 ppm .50741	P_1782 ppm 1.0566	Pb2203 ppm 1.0091	S_1820 ppm .02331	Sb2068 ppm 1.0406
#1	2.4718	49.655	1.0018	19.773	.51330	.50505	5.1840	.50675	1.0560	1.0084	.02848	1.0415
#2	2.4376	49.061	.99107	19.756	.51301	.50504	5.1010	.50806	1.0572	1.0097	.01814	1.0396
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm 1.0154	Si2881 ppm 4.8475	SiO2 ppm 10.374	Sn1899 ppm 1.0172	Sr4077 ppm .49616	Th2837 ppm -.00006	Ti3349 ppm .50854	TI1908 ppm 1.0336	U_3701 ppm -.00577	V_2924 ppm .52027	Zn2062 ppm .50341	Zr3391 ppm .48679
#1	1.0253	4.8151	10.304	1.0192	.49962	.00122	.50844	1.0353	-.00708	.51684	.50378	.48741
#2	1.0054	4.8799	10.443	1.0153	.49269	-.00134	.50864	1.0319	-.00446	.52370	.50304	.48617
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3077.3	Y_3600 Cts/S 53383.	Y_3774 Cts/S 6405.0									
#1	3085.9	53472.	6394.3									
#2	3068.8	53294.	6415.6									

Sample Name: CCB Acquired: 5/30/2015 22:20:09 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00018	Al1670 ppm .00014	As1890 ppm -.00015	B_2089 ppm .00091	Ba4554 ppm .00001	Be3130 ppm .00002	Bi2230 ppm -.00236	Ca3179 ppm .00140	Cd2288 ppm -.00018	Co2286 ppm .00002	Cr2055 ppm .00000	Cu3247 ppm -.00101	Fe2599 ppm .00084
#1	-.00037	-.00001	-.00150	.00123	.00016	.00005	-.00349	.00128	-.00005	.00016	-.00001	-.00118	.00125
#2	.00001	.00029	.00120	.00059	-.00014	.00000	-.00124	.00151	-.00032	-.00012	.00002	-.00085	.00043
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.03616	Li6707 ppm -.00068	Mg2790 ppm .00103	Mn2576 ppm -.00002	Mo2020 ppm .00017	Na5895 ppm .01739	Ni2316 ppm -.00003	P_1782 ppm .00231	Pb2203 ppm -.00058	S_1820 ppm .01652	Sb2068 ppm -.00235	Se1960 ppm .00154	Si2881 ppm -.01975
#1	-.02008	.00047	-.00173	-.00007	.00010	.01719	-.00030	.00283	-.00110	.01370	-.00406	.00236	-.03013
#2	-.05224	-.00183	.00379	.00004	.00024	.01759	.00024	.00180	-.00006	.01935	-.00064	.00072	-.00937
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.04227	Sn1899 ppm .00097	Sr4077 ppm .00013	Th2837 ppm .00311	Ti3349 ppm .00059	TI1908 ppm .00089	U_3701 ppm -.03097	V_2924 ppm -.00023	Zn2062 ppm .00021	Zr3391 ppm .00105			
#1	-.06448	.00014	.00021	.00205	.00074	.00065	-.02199	-.00021	-.00025	.00235			
#2	-.02006	.00180	.00004	.00417	.00044	.00113	-.03994	-.00026	.00067	-.00025			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3121.8	Y_3600 Cts/S 54437.	Y_3774 Cts/S 6471.2										
#1	3122.1	54380.	6501.4										
#2	3121.6	54494.	6441.0										

Sample Name: CCVL3301032II Acquired: 5/30/2015 22:22:31 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.01025	.11860	.01249	.11464	.01054	.00090	.11438	.20970	.00574	.01133	.01086	.01601	.10060	3.1288
Stddev	.00027	.00005	.00166	.00008	.00019	.00009	.00362	.00332	.00019	.00016	.00014	.00013	.00136	.0104
%RSD	2.6669	.04455	13.311	.07401	1.7682	10.033	3.1616	1.5853	3.3385	1.3934	1.3291	.79155	1.3470	.33183
#1	.01045	.11864	.01367	.11458	.01041	.00096	.11693	.20735	.00560	.01122	.01076	.01610	.10156	3.1362
#2	.01006	.11856	.01132	.11470	.01068	.00084	.11182	.21206	.00587	.01144	.01096	.01592	.09964	3.1215

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00987	.22133	.01129	.02141	1.1090	.04454	3.2817	.01021	.01760	.01072	.01770	.48284	1.0333	.10984
Stddev	.00052	.00598	.00010	.00003	.0047	.00014	.0124	.00026	.00308	.00244	.00405	.00688	.0147	.00068
%RSD	5.2290	2.7039	.92215	.12499	.41982	.30933	.37798	2.5466	17.528	22.740	22.894	1.4239	1.4239	.61596
#1	.00951	.22556	.01122	.02143	1.1123	.04464	3.2729	.01040	.01542	.00900	.02056	.48770	1.0437	.11032
#2	.01024	.21710	.01136	.02139	1.1057	.04444	3.2904	.01003	.01978	.01245	.01483	.47798	1.0229	.10936

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01070	.01885	.01062	.01696	.04718	.01074	.02349	.01364
Stddev	.00002	.00122	.00013	.00185	.00318	.00023	.00005	.00064
%RSD	.15021	6.4567	1.2505	10.909	6.7325	2.1486	.21337	4.7101
#1	.01071	.01799	.01071	.01826	.04493	.01057	.02346	.01318
#2	.01068	.01971	.01052	.01565	.04943	.01090	.02353	.01409

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3003.6	52539.	6214.4
Stddev	3.1	130.	14.1
%RSD	.10285	.24722	.22648
#1	3005.8	52631.	6204.5
#2	3001.4	52447.	6224.4

Sample Name: 280-69723-D-6-C Acquired: 5/30/2015 22:25:12 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.01378	-.00184	.01830	.03901	-.00015	-.00078	59.816	.00019
Stddev	.00026	.00048	.00144	.00130	.00018	.00015	.00123	.037	.00014
%RSD	126.73	3.4699	78.112	7.1195	.45447	99.397	157.32	.06151	73.322
#1	.00002	.01344	-.00286	.01922	.03889	-.00026	.00009	59.790	.00009
#2	.00038	.01412	-.00083	.01738	.03914	-.00004	-.00165	59.842	.00029
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00034	.00025	.22903	3.1584	.01667	45.377	.00179	-.00139
Stddev	.00026	.00007	.00030	.00046	.0407	.00182	.035	.00008	.00044
%RSD	435.78	20.335	118.29	.19991	1.2880	10.893	.07621	4.3856	31.738
#1	.00025	.00029	.00004	.22870	3.1872	.01795	45.402	.00173	-.00108
#2	-.00013	.00039	.00047	.22935	3.1297	.01539	45.353	.00184	-.00170
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8053	.00543	.01157	.00177	21.359	-.00211	.00544	4.1862	8.9585
Stddev	.0122	.00044	.00098	.00009	.092	.00055	.00279	.0094	.0200
%RSD	.43406	8.1155	8.4974	4.9747	.43148	25.982	51.194	.22345	.22345
#1	2.8139	.00574	.01087	.00183	21.425	-.00250	.00347	4.1928	8.9727
#2	2.7967	.00512	.01226	.00170	21.294	-.00172	.00741	4.1796	8.9443
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00197	.03967	.00248	.00037	-.00443	-.00681	-.00170	.00091	.00033
Stddev	.00008	.00023	.00066	.00024	.00031	.01623	.00025	.00061	.00095
%RSD	4.0967	.58082	26.605	63.890	6.8845	238.43	14.510	66.933	286.33
#1	.00203	.03984	.00202	.00054	-.00422	.00467	-.00152	.00048	-.00034
#2	.00192	.03951	.00295	.00020	-.00465	-.01828	-.00187	.00134	.00100
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2933.4	51287.	6231.4						
Stddev	.9	122.	18.7						
%RSD	.03108	.23732	.29951						
#1	2934.0	51201.	6218.2						
#2	2932.7	51373.	6244.6						

Sample Name: 280-69723-D-7-C Acquired: 5/30/2015 22:27:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00227	-.00218	.01806	.03398	-.00011	.00112	63.535	.00005
Stddev	.00006	.00026	.00145	.00006	.00003	.00011	.00076	.005	.00032
%RSD	60.454	11.234	66.533	.35636	.07949	99.551	67.649	.00757	689.48
#1	-.00006	.00245	-.00321	.01801	.03396	-.00018	.00059	63.531	.00027
#2	-.00014	.00209	-.00116	.01810	.03400	-.00003	.00166	63.538	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00643	.00098	.00029	1.1474	1.8453	.02465	28.544	.04255	-.00160
Stddev	.00002	.00001	.00025	.0068	.0069	.00024	.041	.00016	.00047
%RSD	.27970	.99839	85.345	.59043	.37480	.98228	.14530	.38017	29.054
#1	.00645	.00099	.00047	1.1426	1.8404	.02482	28.515	.04266	-.00193
#2	.00642	.00097	.00012	1.1521	1.8502	.02447	28.573	.04243	-.00127
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5246	.01500	.00724	.00228	22.791	.00086	.00254	4.0383	8.6419
Stddev	.0092	.00070	.00208	.00067	.027	.00037	.00279	.0518	.1108
%RSD	.20217	4.6536	28.749	29.534	.11637	42.864	110.13	1.2817	1.2817
#1	4.5182	.01550	.00577	.00180	22.810	.00112	.00056	4.0017	8.5636
#2	4.5311	.01451	.00871	.00276	22.772	.00060	.00451	4.0749	8.7202
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00105	.04953	.00100	-.00014	-.00512	-.03493	-.00094	.00151	-.00047
Stddev	.00091	.00041	.00079	.00038	.00061	.00228	.00051	.00043	.00093
%RSD	86.634	.83715	79.311	274.87	11.988	6.5274	53.914	28.651	198.45
#1	.00041	.04923	.00155	.00013	-.00556	-.03654	-.00058	.00182	.00019
#2	.00169	.04982	.00044	-.00041	-.00469	-.03331	-.00129	.00121	-.00113
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2935.5	51232.	6274.0						
Stddev	8.4	26.	3.2						
%RSD	.28766	.05018	.05028						
#1	2941.5	51250.	6271.7						
#2	2929.5	51213.	6276.2						

Sample Name: 280-69723-D-9-C Acquired: 5/30/2015 22:30:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.00236	-.00101	.01589	.03337	-.00018	.00042	62.392	-.00006
Stddev	.00058	.00042	.00195	.00021	.00018	.00001	.00061	.147	.00023
%RSD	161.74	17.888	192.97	1.3099	.52903	5.1070	145.70	.23561	394.34
#1	-.00005	.00206	-.00239	.01575	.03324	-.00017	.00085	62.288	-.00022
#2	.00076	.00266	.00037	.01604	.03349	-.00019	-.00001	62.496	.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00668	.00107	.00031	1.0159	1.7946	.02477	27.857	.04191	-.00138
Stddev	.00064	.00024	.00026	.0054	.0392	.00037	.023	.00052	.00003
%RSD	9.5939	22.237	81.584	.53443	2.1832	1.4927	.08118	1.2356	2.1318
#1	.00623	.00090	.00013	1.0120	1.8223	.02451	27.873	.04154	-.00140
#2	.00713	.00124	.00049	1.0197	1.7669	.02503	27.841	.04227	-.00136
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4293	.01470	.01054	.00252	22.071	-.00030	-.00119	3.9495	8.4519
Stddev	.0011	.00046	.00198	.00118	.124	.00052	.00361	.0247	.0529
%RSD	.02532	3.1457	18.810	46.653	.56150	173.28	303.01	.62626	.62626
#1	4.4301	.01437	.00913	.00335	21.984	-.00066	.00136	3.9320	8.4144
#2	4.4285	.01502	.01194	.00169	22.159	.00007	-.00375	3.9670	8.4893
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00196	.04856	.00311	-.00004	-.00608	-.03568	-.00116	.00149	-.00010
Stddev	.00106	.00037	.00100	.00013	.00242	.00059	.00049	.00025	.00276
%RSD	54.196	.75395	32.332	332.44	39.872	1.6628	42.425	16.951	2697.0
#1	.00121	.04830	.00240	.00005	-.00437	-.03526	-.00082	.00166	.00185
#2	.00272	.04882	.00382	-.00013	-.00779	-.03609	-.00151	.00131	-.00205
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2950.8	51491.	6272.8						
Stddev	18.5	44.	39.3						
%RSD	.62653	.08540	.62581						
#1	2963.8	51522.	6300.6						
#2	2937.7	51459.	6245.1						

Sample Name: CCVH-3294468 Acquired: 5/30/2015 22:33:10 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	-00712	51.618	.00086	.00116	.00048	-.00011	W 1.0834	.04389	-.00022	-.00040	.00052
Stddev	.00027	.355	.00074	.00105	.00016	.00005	.0056	.00587	.00003	.00040	.00013
%RSD	3.8177	.68849	85.844	91.070	33.479	40.085	.52156	13.369	14.229	99.681	25.808
#1	-.00693	51.367	.00138	.00041	.00059	-.00008	1.0874	.04804	-.00025	-.00069	.00043
#2	-.00732	51.870	.00034	.00190	.00037	-.00014	1.0794	.03974	-.00020	-.00012	.00062
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 5.0000%	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00092	51.101	-.03391	.00008	.05743	-.00153	-.00069	259.64	.00211	.00856	.00134
Stddev	.00030	.984	.06370	.00055	.00184	.00010	.00015	.23	.00020	.00129	.00111
%RSD	32.460	1.9247	187.87	648.39	3.2046	6.8020	22.041	.08882	9.3028	15.066	82.803
#1	-.00113	50.405	.01114	-.00030	.05613	-.00145	-.00058	259.81	.00225	.00947	.00055
#2	-.00071	51.796	-.07895	.00047	.05873	-.00160	-.00080	259.48	.00197	.00765	.00212
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	W 5.2950	-.01305	.01080	-.03117	-.06669	-.00120	.00038	W 5.2699	-.01387	.00267	W 10.951
Stddev	.0382	.00044	.00132	.00883	.01890	.00130	.00004	.0312	.00010	.00106	.089
%RSD	.72162	3.3659	12.251	28.338	28.338	108.66	10.481	.59175	.71192	39.473	.81658
#1	5.3220	-.01274	.00986	-.02492	-.05333	-.00212	.00041	5.2920	-.01394	.00193	11.014
#2	5.2680	-.01336	.01173	-.03741	-.08006	-.00028	.00035	5.2479	-.01380	.00342	10.888
Check ? Value Range	Chk Warn 5.0000 5.0000%	None	None	None	None	None	Chk Warn 5.0000 5.0000%	None	None	Chk Warn 10.000 5.0000%	
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00290	.00051	-.13876								
Stddev	.00039	.00117	.00630								
%RSD	13.429	227.05	4.5432								
#1	.00263	-.00031	-.14322								
#2	.00318	.00134	-.13431								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2946.7	50722.	6169.8								
Stddev	.1	104.	33.0								
%RSD	.00294	.20529	.53410								
#1	2946.6	50649.	6193.1								
#2	2946.7	50796.	6146.5								

Sample Name: CCV-3296664 Acquired: 5/30/2015 22:35:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.51270	F .57055	1.0436	.53867	.50454	.49342	.00025	4.9916	.53542	.52312	.52666	.52086
Stddev	.00266	.00465	.0021	.00240	.00185	.00171	.00300	.0170	.00053	.00174	.00164	.00409
%RSD	.51970	.81427	.19705	.44481	.36727	.34563	1215.8	.34113	.09906	.33305	.31075	.78472
#1	.51459	.56727	1.0421	.53698	.50323	.49222	.00237	5.0036	.53505	.52189	.52550	.52375
#2	.51082	.57384	1.0450	.54037	.50585	.49463	-.00187	4.9796	.53580	.52436	.52781	.51797
Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.4949	50.599	1.0191	20.393	.52581	.51201	5.2356	.51468	1.0733	1.0283	.01471	1.0627
Stddev	.0071	.135	.0010	.120	.00191	.00172	.0295	.00174	.0082	.0019	.00505	.0018
%RSD	.28323	.26615	.09521	.58596	.36325	.33509	.56382	.33794	.76682	.18154	34.351	.17337
#1	2.4999	50.504	1.0184	20.478	.52716	.51079	5.2147	.51345	1.0675	1.0270	.01829	1.0614
#2	2.4899	50.694	1.0198	20.309	.52446	.51322	5.2564	.51591	1.0791	1.0297	.01114	1.0640
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0403	4.8680	10.417	1.0331	.50561	.00183	.52142	1.0563	-.01722	.53698	.51204	.49352
Stddev	.0040	.0182	.039	.0024	.00197	.00194	.00285	.0052	.00191	.00060	.00031	.00493
%RSD	.38739	.37355	.37355	.23294	.38930	106.24	.54583	.49523	11.106	.11127	.06088	.99826
#1	1.0375	4.8808	10.445	1.0314	.50422	.00320	.52344	1.0526	-.01857	.53740	.51182	.49700
#2	1.0432	4.8551	10.390	1.0348	.50701	.00046	.51941	1.0600	-.01587	.53656	.51226	.49003
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3035.6	52426.	6255.1									
Stddev	4.7	96.	56.7									
%RSD	.15357	.18332	.90589									
#1	3032.3	52358.	6295.1									
#2	3038.9	52494.	6215.0									

Sample Name: CCB Acquired: 5/30/2015 22:38:21 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00015	.00052	-.00062	.00093	.00021	-.00008	.00035	.00120	-.00012	.00018	-.00009	-.00072	-.00047
Stddev	.00084	.00022	.00164	.00022	.00006	.00003	.00138	.00121	.00007	.00002	.00006	.00002	.00099
#1	.00074	.00067	-.00178	.00078	.00025	-.00010	-.00063	.00206	-.00007	.00019	-.00004	-.00074	-.00117
#2	-.00045	.00037	.00054	.00109	.00017	-.00006	.00133	.00035	-.00017	.00016	-.00013	-.00071	.00023

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.07859	-.00014	.00359	-.00002	.00005	.02136	.00010	-.00242	-.00052	.00711	-.00007	-.00034	-.02803
Stddev	.00548	.00075	.00179	.00002	.00076	.00661	.00037	.00043	.00161	.00034	.00059	.00474	.01615
#1	-.07471	-.00068	.00485	-.00001	-.00049	.02603	.00016	-.00211	.00062	.00687	.00035	.00302	-.01661
#2	-.08246	.00039	.00232	-.00003	.00058	.01668	-.00037	-.00272	-.00166	.00736	-.00048	-.00369	-.03945

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.05998	.00167	.00004	.00149	-.00002	.00018	-.02268	.00063	.00052	.00055			
Stddev	.03456	.00067	.00000	.00063	.00011	.00053	.02179	.00064	.00041	.00032			
#1	-.03555	.00120	.00003	.00105	-.00009	-.00019	-.03809	.00108	.00023	.00077			
#2	-.08442	.00215	.00004	.00193	.00006	.00055	-.00728	.00018	.00080	.00032			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3078.8	53321.	6343.1										
Stddev	2.8	261.	69.4										
#1	3076.9	53505.	6294.0										
#2	3080.8	53136.	6392.2										

Sample Name: CCVL3301032II Acquired: 5/30/2015 22:40:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.01024	.11449	.01397	.10831	.00996	.00090	.10837	.19945	.00529	.01079	.01043	.01554	.09573	2.9925
Stddev	.00051	.00044	.00118	.00046	.00021	.00001	.00100	.00775	.00009	.00001	.00023	.00073	.00109	.0074
%RSD	4.9530	.38843	8.4407	.42380	2.1360	.86469	.91998	3.8844	1.6280	.09992	2.1842	4.6896	1.1358	.24697
#1	.01060	.11418	.01314	.10799	.01011	.00089	.10767	.20493	.00535	.01078	.01027	.01606	.09650	2.9978
#2	.00988	.11481	.01480	.10863	.00981	.00090	.10908	.19397	.00523	.01080	.01060	.01503	.09496	2.9873

Check ? Chk Pass Chk Pass

Value Range

Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00912	.21028	.01071	.02009	1.0517	.04240	3.1085	.00892	.01829	.00818	.01687	.45033	.96371	.10419
Stddev	.00049	.00058	.00019	.00013	.0005	.00122	.0117	.00007	.00544	.00119	.00083	.00452	.00967	.00150
%RSD	5.4091	.27477	1.7860	.63928	.04361	2.8834	.37515	.82132	29.751	14.612	4.9026	1.0033	1.0033	1.4419
#1	.00947	.20987	.01084	.02019	1.0520	.04154	3.1002	.00897	.01444	.00733	.01628	.44714	.95687	.10313
#2	.00877	.21069	.01057	.02000	1.0514	.04327	3.1167	.00887	.02214	.00902	.01745	.45353	.97055	.10526

Check ? Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass

Value Range

Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01019	.01714	.01005	.01782	.04948	.01051	.02218	.01363
Stddev	.00010	.00012	.00008	.00078	.01528	.00088	.00046	.00094
%RSD	.93530	.67548	.75695	4.3519	30.884	8.4140	2.0724	6.9094
#1	.01026	.01722	.01000	.01728	.06029	.01114	.02186	.01296
#2	.01012	.01706	.01011	.01837	.03868	.00989	.02251	.01429

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass

Value Range

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3098.5	53888.	6396.7
Stddev	5.0	45.	10.7
%RSD	.16091	.08370	.16768
#1	3095.0	53856.	6404.3
#2	3102.0	53920.	6389.1

Sample Name: MB 280-279390/1-A Acquired: 5/30/2015 22:43:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.00579	.00018	.00079	.00021	-0.0003	.00059	.03063	-0.00010
Stddev	.00019	.00018	.00060	.00034	.00002	.00001	.00062	.01001	.00003
%RSD	116.74	3.1279	329.74	43.457	8.4960	37.616	105.11	32.697	29.222
#1	.00029	.00591	-.00024	.00103	.00023	-.00002	.00103	.02355	-.00012
#2	.00003	.00566	.00060	.00055	.00020	-.00004	.00015	.03771	-.00008
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	-.00001	-.00054	.02624	-.07468	-.00143	.00059	.00021	.00029
Stddev	.00022	.00012	.00057	.00448	.01018	.00106	.00663	.00004	.00034
%RSD	360.14	1186.6	105.69	17.082	13.630	73.641	1119.8	20.546	117.32
#1	-.00022	.00008	-.00094	.02307	-.08188	-.00069	-.00410	.00018	.00005
#2	.00010	-.00010	-.00014	.02941	-.06748	-.00218	.00528	.00024	.00053
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02264	-.00016	.00421	-.00141	.01141	-.00269	.00010	-.02321	-.04967
Stddev	.02373	.00037	.00074	.00053	.00526	.00161	.00192	.01618	.03463
%RSD	104.82	241.66	17.517	37.882	46.098	59.664	1999.1	69.725	69.725
#1	.00586	.00011	.00473	-.00178	.01513	-.00383	-.00126	-.03465	-.07416
#2	.03942	-.00042	.00369	-.00103	.00769	-.00156	.00146	-.01177	-.02518
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	.00014	.00100	.00040	-.00004	-.01595	-.00019	.00078	.00094
Stddev	.00080	.00010	.00205	.00036	.00049	.02426	.00022	.00110	.00021
%RSD	94.668	70.564	204.82	90.836	1131.7	152.12	117.36	141.24	21.980
#1	.00141	.00007	.00245	.00014	-.00039	-.03310	-.00034	.00156	.00079
#2	.00028	.00021	-.00045	.00066	.00030	.00121	-.00003	.00000	.00108
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3126.1	55024.	6455.9						
Stddev	4.3	132.	28.9						
%RSD	.13603	.23986	.44825						
#1	3129.2	55118.	6435.5						
#2	3123.1	54931.	6476.4						

Sample Name: LCS 280-279390/2-A Acquired: 5/30/2015 22:45:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04761	As1890 ppm 2.1291	B_2089 ppm 1.0803	Ba4554 ppm F 1.1266	Be3130 ppm 2.0513	Bi2230 ppm .05005	Ca3179 ppm 2.1625	Cd2288 ppm 49.156
#1	.04811	2.1404	1.0868	1.1314	2.0537	.04962	2.1709	49.163	.11067
#2	.04711	2.1179	1.0738	1.1218	2.0490	.05049	2.1540	49.148	.11030
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.1050 .86000	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .52051	Cu3247 ppm F .21078	Fe2599 ppm .26642	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	.52131	.21065	.26579	.98069	51.780	1.0308	51.371	.53076	1.0882
#2	.51971	.21092	.26705	1.0070	51.716	1.0296	51.646	.53380	1.0806
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 55.508	P_1782 ppm .51395	Pb2203 ppm F 11.443	S_1820 ppm .52591	Sb2068 ppm 2.2037	Se1960 ppm F .56689	Si2881 ppm 2.2355	SiO2 ppm 9.9790
#1	55.407	.51578	11.466	.52598	2.2103	.57291	2.2489	9.9256	21.241
#2	55.609	.51213	11.419	.52584	2.1971	.56087	2.2220	10.032	21.469
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Fail 11.100 9.1000	Chk Pass	None	Chk Fail .55499 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.1175	Th2837 ppm 1.0262	Ti3349 ppm 1.0698	Tl1908 ppm 1.0635	U_3701 ppm 2.1475	V_2924 ppm 2.2222	Zn2062 ppm .54329	Zr3391 ppm .51347
#1	2.1250	1.0261	1.0670	1.0593	2.1620	2.1991	.54084	.51168	.47334
#2	2.1101	1.0263	1.0726	1.0677	2.1330	2.2454	.54574	.51526	.48033
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3017.7	Y_3774 Cts/S 51978.	377.433 {89}					
#1	3008.5	52066.	6412.7						
#2	3027.0	51890.	6423.8						

Sample Name: 280-69806-A-1-A Acquired: 5/30/2015 22:48:13 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00014	.00673	-.00580	.10684	.60765	.00006	.00256	225.72	.00024
#2	.00065	.00666	-.00032	.10197	.59791	-.00004	.00228	222.51	-.00033
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00018	.00088	.03344	.02397	1.7812	.05846	58.881	.08851	-.00127
#2	-.00085	.00109	.03326	.01120	1.7864	.05718	58.793	.08820	-.00173
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	145.53	.00403	.02501	.00418	4.5209	-.00071	.00767	13.725	29.372
#2	143.73	.00411	.02261	.00164	4.5054	-.00279	.00505	13.313	28.489
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00318	1.3682	.00131	.00026	-.01001	-.00076	.00007	.21308	.00102
#2	-.00060	1.3489	.00239	.00029	-.00740	-.02156	.00054	.21579	.00114
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2949.5	51454.	6307.7						
#2	2923.3	51369.	6399.1						

Sample Name: 280-69806-A-2-A Acquired: 5/30/2015 22:50:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00032	.00527	-.00005	.06401	.34199	-.00001	.00120	122.57	.00020
#2	.00040	.00382	-.00243	.06272	.34346	-.00006	.00386	122.99	-.00016
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00107	.00060	.03198	.01514	1.8206	.02403	20.742	.08734	-.00160
#2	.00099	.00040	.03164	.01566	1.8656	.02291	20.749	.08812	-.00226
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	164.88	.00573	.03233	.00234	18.021	.00252	.00327	12.951	27.714
#2	165.96	.00508	.03477	.00477	18.075	.00373	.01000	13.219	28.288
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00235	.53012	.00352	.00082	-.00934	-.02320	.00549	.05447	.00149
#2	.00168	.53336	.00080	-.00015	-.01083	-.01645	.00620	.05412	.00117
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2989.2	52246.	6445.7						
#2	3004.7	51979.	6426.4						

Sample Name: 280-69806-A-3-A Acquired: 5/30/2015 22:53:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00292	-.00108	.00102	.00005	-.00012	.00044	.04412	-.00009
Stddev	.00014	.00000	.00239	.00007	.00000	.00016	.00049	.00587	.00003
%RSD	70.875	.02274	221.85	6.5900	1.2959	128.13	113.19	13.307	31.294
#1	-.00010	.00292	-.00277	.00098	.00005	-.00001	.00079	.04827	-.00007
#2	-.00030	.00292	.00061	.00107	.00005	-.00023	.00009	.03997	-.00011
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	-.00021	-.00081	.00300	-.01703	-.00012	.00274	.00017	.00045
Stddev	.00005	.00002	.00034	.00167	.01275	.00070	.00064	.00009	.00013
%RSD	58.472	9.6103	41.914	55.791	74.868	589.00	23.442	50.818	28.214
#1	.00013	-.00023	-.00057	.00418	-.02605	.00038	.00319	.00011	.00053
#2	.00006	-.00020	-.00105	.00182	-.00802	-.00061	.00228	.00023	.00036
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10879	-.00016	.00372	-.00145	.01112	-.00223	-.00052	-.00431	-.00921
Stddev	.01091	.00019	.00086	.00032	.00134	.00366	.00085	.00294	.00630
%RSD	10.029	123.39	23.138	22.237	12.071	163.94	165.31	68.386	68.386
#1	.11651	-.00029	.00433	-.00167	.01017	-.00482	.00009	-.00222	-.00476
#2	.10108	-.00002	.00311	-.00122	.01207	.00036	-.00112	-.00639	-.01367
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.00017	.00154	-.00014	-.00070	.00833	.00016	.00172	.00094
Stddev	.00046	.00003	.00114	.00017	.00070	.00627	.00015	.00082	.00131
%RSD	95.742	19.503	74.375	121.81	100.84	75.276	94.125	47.552	139.87
#1	.00081	.00020	.00234	-.00026	-.00020	.01276	.00027	.00114	.00001
#2	.00016	.00015	.00073	-.00002	-.00120	.00390	.00005	.00230	.00187
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3175.1	55355.	6564.4						
Stddev	9.2	293.	18.5						
%RSD	.28898	.52985	.28257						
#1	3168.6	55562.	6551.3						
#2	3181.5	55147.	6577.5						

Sample Name: 280-69838-C-2-A Acquired: 5/30/2015 22:55:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 5.4018	B_2089 .00584	Ba4554 .06572	Be3130 .02921	Bi2230 .00004	Ca3179 W 541.06	Cd2288 -.00085
#1	-.00008	5.3681	-.00700	.06626	.02904	.00006	-.00107	544.95	-.00090
#2	.00003	5.4354	-.00469	.06519	.02939	.00003	.00347	537.16	-.00079
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 0.0229	Fe2599 .00981	K_7664 4.6042	Li6707 766.490 {44}	Mg2790 670.784 {50}	Mn2576 279.079 {121}2	Mo2020 257.610 {131}
#1	.00264	.00234	.00983	4.5869	9.8388	.04233	86.942	.13257	-.00365
#2	.00215	.00224	.00979	4.6215	9.9913	.04484	86.656	.13204	-.00334
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 .00564	Pb2203 .17143	S_1820 .00569	Sb2068 F 384.53	Se1960 .00656	Si2881 .03783	SiO2 14.808
#1	371.53	.00562	.16861	.00498	383.69	.00687	.03659	14.731	31.523
#2	372.63	.00567	.17426	.00640	385.38	.00625	.03907	14.886	31.857
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 W 11.912	Ti3349 .00446	Tl1908 .08125	U_3701 -.00693	V_2924 -.00094	Zn2062 .00915	Zr3391 .01673
#1	-.00078	12.012	.00390	.08146	-.00532	-.03795	.00836	.01646	.00829
#2	-.00116	11.812	.00501	.08104	-.00855	.03606	.00993	.01700	.00905
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	360.073 {94}	377.433 {89}				
#1	2848.6	49602.	6331.5						
#2	2850.1	49704.	6328.1						

Sample Name: 280-69842-B-2-A Acquired: 5/30/2015 22:58:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00046	.02354	-.00937	.03799	.00813	-.00024	.00319	432.86	-.00056
#2	.00106	.02331	-.00069	.03584	.00810	-.00004	.00018	427.67	-.00098
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00096	.00061	.00145	.02026	11.257	.02826	37.206	.07723	-.00243
#2	-.00057	.00081	.00057	.02084	11.193	.02721	37.006	.07745	-.00221
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	505.63	.00480	.00942	.00595	625.71	.00654	.03022	5.2528	11.241
#2	503.88	.00443	.00668	.00169	620.85	.00281	.03824	5.2452	11.225
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00006	10.724	.00268	.00027	-.01316	-.04367	-.00159	.00478	.00159
#2	-.00001	10.898	.00399	.00040	-.00821	-.03937	-.00186	.00487	.00162
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2852.9	49959.	6317.5						
#2	2870.4	50248.	6421.1						

Sample Name: 280-69842-B-2-A SD@5 Acquired: 5/30/2015 23:01:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00023	.00542	.00235	.00725	.00180	.00003	.00240	89.320	-.00035
#2	.00046	.00473	.00217	.00764	.00145	-.00005	-.00052	89.823	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00020	.00043	-.00023	.00360	2.1910	.00626	7.9125	.01576	-.00176
#2	.00001	.00002	.00007	.00020	.0689	.00051	.0143	.00010	.00011
	5.2176	5.0633	30.169	5.4559	3.1439	8.1970	.18097	.60434	6.4874
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	103.71	.00299	.00368	.00533	123.98	-.00176	.00525	1.0280	2.1999
#2	.21	.00023	.00158	.00057	.41	.00066	.00777	.0011	.0024
	.20049	7.7277	43.012	10.655	.33469	37.745	148.04	.10893	.10893
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00446	2.2260	.00152	-.00011	-.00604	-.00901	-.00040	.00031	.00049
#2	.00134	.0051	.00104	.00011	.00027	.04105	.00032	.00056	.00061
	30.112	.22847	68.134	97.477	4.5299	455.81	77.983	178.67	123.70
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3056.9	53373.	6680.6						
#2	3051.6	53789.	6612.3						

Sample Name: 280-69842-B-2-B MS Acquired: 5/30/2015 23:04:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 167.079 {502}	Al3092 ppm 309.271 {109}	As1890 ppm 189.042 {478}	B_2089 ppm 208.959 {461}	Ba4554 ppm 455.403 {74}	Be3130 ppm 313.042 {108}	Bi2230 ppm 223.061 {451}	Ca3179 ppm 317.933 {106}
#1	.04769	1.9367	2.4888	1.0874	1.1177	2.0079	.04770	2.1134	493.73
#2	.04753	1.9271	2.4387	1.0830	1.1123	1.9891	.04718	2.1027	491.53
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 ppm 228.616 {447}	Cr2055 ppm 205.560 {464}	Cu3247 ppm 324.754 {104}	Fe2599 ppm 259.940 {130}	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}
#1	.10847	.48269	.18723	.26319	.97204	64.032	1.0752	85.166	.57733
#2	.10828	.47959	.18624	.26233	.95869	63.378	1.0676	84.088	.56984
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 ppm 818.326 {41}	Ni2316 ppm 231.604 {446}	P_1782 ppm 178.284 {489}	Pb2203 ppm 220.353 {453}	S_1820 ppm 182.034 {485}	Sb2068 ppm 206.833 {463}	Se1960 ppm 196.090 {472}	Si2881 ppm 288.158 {117}
#1	1.0286	571.40	.47542	11.935	.47074	643.79	.57214	2.3247	15.361
#2	1.0266	567.00	.47230	11.842	.47041	643.18	.56280	2.3047	15.336
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 ppm 189.989 {477}	Sr4077 ppm 407.771 {83}	Th2837 ppm 283.730 {119}	Ti3349 ppm 334.904 {101}	Tl1908 ppm 190.856 {477}	U_3701 ppm 370.152 {91}	V_2924 ppm 292.402 {115}	Zn2062 ppm 206.200 {163}
#1	32.873	1.9437	12.060	1.0317	1.0208	1.7928	2.1027	.52156	.47894
#2	32.820	1.9318	11.858	1.0225	1.0085	1.7748	2.0504	.51557	.46806
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.45843								
#2	.45851								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69842-B-2-B MS Acquired: 5/30/2015 23:04:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2842.4	49395.	6329.5
Stddev	12.4	327.	53.8
%RSD	.43501	.66146	.85015
#1	2833.7	49164.	6291.5
#2	2851.2	49626.	6367.6

Sample Name: 280-69842-B-2-C MSD Acquired: 5/30/2015 23:07:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.04841	1.9372	2.4488	1.1085	1.1319	1.9846	.04690	2.1477	468.68
#2	.04843	1.9335	2.4377	1.1067	1.1329	1.9919	.04690	2.1479	479.20
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}
#1	.10959	.48782	.19098	.26713	.94714	63.286	1.0682	84.314	.57255
#2	.10905	.48569	.19035	.26820	.94548	63.614	1.0753	84.307	.57551
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	1.0460	563.22	.47819	12.040	.47459	653.88	.57664	2.3529	15.135
#2	1.0459	566.57	.47904	12.034	.47970	651.09	.57368	2.3592	15.156
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	32.389	1.9509	11.824	1.0288	1.0233	1.7938	2.0749	.52147	.45783
#2	32.434	1.9562	11.818	1.0364	1.0256	1.8023	2.1367	.51851	.45953
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.44734								
#2	.45510								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69842-B-2-C MSD Acquired: 5/30/2015 23:07:01 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279390 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2872.8	51044.	6730.2
Stddev	13.3	56.	20.1
%RSD	.46402	.10946	.29885
#1	2882.2	51084.	6716.0
#2	2863.3	51005.	6744.4

Sample Name: CCVH-3294468 Acquired: 5/30/2015 23:09:43 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -00755	Al3092 ppm 47.873	As1890 ppm -00442	B_2089 ppm .00348	Ba4554 ppm .00056	Be3130 ppm .00006	Bi2230 ppm W 1.0570	Ca3179 ppm .07529	Cd2288 ppm -.00030	Co2286 ppm -.00035	Cr2055 ppm .00044
#1	-.00782	47.867	-.00517	.00371	.00085	.00007	1.0596	.07878	-.00036	-.00037	.00051
#2	-.00728	47.880	-.00367	.00324	.00027	.00006	1.0543	.07180	-.00023	-.00033	.00037
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 5.0000%	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00098	Fe2714 ppm 46.938	K_7664 ppm .09103	Li6707 ppm .00097	Mg2790 ppm .05035	Mn2576 ppm -.00156	Mo2020 ppm .00012	Na8183 ppm 242.96	Ni2316 ppm .00203	P_1782 ppm .00695	Pb2203 ppm .00119
#1	-.00055	46.587	.10903	.00057	.05073	-.00164	.00010	242.35	.00184	.00768	.00071
#2	-.00140	47.290	.07303	.00137	.04998	-.00149	.00013	243.56	.00222	.00622	.00167
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.2335	Sb2068 ppm -.01096	Se1960 ppm .01049	Si2881 ppm -.03683	SiO2 ppm -.07882	Sn1899 ppm -.00051	Sr4077 ppm .00153	Th2837 ppm 4.9278	Ti3349 ppm -.01204	Tl1908 ppm -.00032	U_3701 ppm 10.309
#1	5.2920	-.01190	.01318	-.04450	-.09522	-.00021	.00166	4.9510	-.01197	-.00100	10.442
#2	5.1749	-.01002	.00779	-.02917	-.06241	-.00080	.00139	4.9046	-.01212	-.00036	10.176
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Pass	
Elem Units Avg Stddev %RSD	V_2924 ppm .00299	Zn2062 ppm -.00041	Zr3391 ppm -.12999								
#1	.00347	-.00060	-.13146								
#2	.00251	-.00022	-.12852								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3126.3	Y_3600 Cts/S 55257.	Y_3774 Cts/S 6960.6								
#1	3123.3	54959.	6986.0								
#2	3129.3	55555.	6935.2								

Sample Name: CCV-3296664 Acquired: 5/30/2015 23:12:25 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49718	Al1670 ppm F .56301	As1890 ppm 1.0101	B_2089 ppm .52974	Ba4554 ppm .48496	Be3130 ppm .47023	Bi2230 ppm -.00115	Ca3179 ppm 4.6996	Cd2288 ppm .51847	Co2286 ppm .50050	Cr2055 ppm .52983	Cu3247 ppm .51082
#1	.49969	.56542	1.0136	.53056	.48355	.46920	-.00087	4.6844	.51864	.49926	.53024	.51257
#2	.49467	.56061	1.0066	.52893	.48638	.47127	-.00143	4.7147	.51831	.50174	.52942	.50907
Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm 2.3582	K_7664 ppm 48.232	Li6707 ppm .98052	Mg2790 ppm 19.214	Mn2576 ppm .49792	Mo2020 ppm .49244	Na5895 ppm 5.0803	Ni2316 ppm .49270	P_1782 ppm 1.0524	Pb2203 ppm .98261	S_1820 ppm .04997	Sb2068 ppm .10439
#1	2.3537	48.121	.97698	19.285	.50010	.49252	5.0730	.49285	1.0513	.98332	.05044	1.0445
#2	2.3626	48.343	.98406	19.143	.49573	.49236	5.0875	.49255	1.0534	.98191	.04949	1.0433
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm 1.0229	Si2881 ppm 4.5640	SiO2 ppm 9.7669	Sn1899 ppm .99041	Sr4077 ppm .48578	Th2837 ppm -.00013	Ti3349 ppm .49699	TI1908 ppm 1.0219	U_3701 ppm -.01283	V_2924 ppm .50677	Zn2062 ppm .47312	Zr3391 ppm .46819
#1	1.0172	4.5571	9.7521	.99257	.48470	.00172	.49846	1.0208	-.03563	.51183	.47502	.46566
#2	1.0286	4.5708	9.7816	.98826	.48685	-.00198	.49551	1.0231	-.00997	.50172	.47121	.47072
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3196.5	Y_3600 Cts/S 56262.	Y_3774 Cts/S 6918.5									
#1	3200.3	56075.	6930.2									
#2	3192.7	56450.	6906.7									

Sample Name: CCB Acquired: 5/30/2015 23:14:54 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00003	Al1670 ppm -.00004	As1890 ppm -.00167	B_2089 ppm .00129	Ba4554 ppm .00019	Be3130 ppm .00007	Bi2230 ppm -.00098	Ca3179 ppm .03771	Cd2288 ppm .00010	Co2286 ppm .00020	Cr2055 ppm .00005	Cu3247 ppm -.00107	Fe2599 ppm .00255
#1	.00015	-.00015	.00008	.00135	.00049	.00017	.00009	.07394	-.00008	.00014	.00016	-.00131	.00502
#2	-.00022	.00006	-.00342	.00122	-.00010	-.00003	-.00205	.00148	.00029	.00027	-.00006	-.00083	.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm -.01813	Li6707 ppm .00115	Mg2790 ppm -.00157	Mn2576 ppm -.00005	Mo2020 ppm .00045	Na5895 ppm .16302	Ni2316 ppm -.00032	P_1782 ppm -.00005	Pb2203 ppm .00079	S_1820 ppm .03785	Sb2068 ppm -.00109	Se1960 ppm -.00310	Si2881 ppm -.02878
#1	-.02255	.00141	-.00129	-.00007	.00029	.21849	-.00048	-.00038	.00059	.04061	-.00038	-.00249	-.03112
#2	-.01371	.00089	-.00185	-.00002	.00060	.10755	-.00015	.00028	.00099	.03509	-.00180	-.00371	-.02643
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.06158	Sn1899 ppm .00044	Sr4077 ppm .00099	Th2837 ppm .00258	Ti3349 ppm .00044	TI1908 ppm .00153	U_3701 ppm -.02044	V_2924 ppm .00003	Zn2062 ppm -.00005	Zr3391 ppm .00112			
#1	-.06660	.00120	.00192	.00183	.00048	.00256	-.02874	-.00020	.00014	.00202			
#2	-.05656	-.00031	.00006	.00332	.00041	.00050	-.01214	.00025	-.00024	.00022			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3198.3	Y_3600 Cts/S 56338.	Y_3774 Cts/S 6852.9										
#1	3195.5	56129.	6808.7										
#2	3201.0	56547.	6897.1										

Sample Name: CCVL3301032 Acquired: 5/30/2015 23:17:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00988	.10836	.01386	.10698	.00977	.00089	.10665	.18873	.00525	.01044	.01073	.01467
Stddev	.00068	.00097	.00097	.00057	.00010	.00007	.00073	.00796	.00032	.00008	.00028	.00013
%RSD	6.9179	.89450	7.0321	.53610	1.0224	7.3698	.68791	4.2183	6.0676	.77984	2.5952	.91077

#1	.01036	.10767	.01317	.10739	.00970	.00093	.10717	.18310	.00547	.01038	.01093	.01457
#2	.00940	.10905	.01455	.10658	.00984	.00084	.10613	.19436	.00502	.01049	.01053	.01476

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09034	2.8972	.00941	.19641	.01030	.01997	1.0793	.04017	3.0318	.00830	.03097	.00933
Stddev	.00389	.0934	.00051	.00446	.00001	.00043	.0322	.00007	.0094	.00026	.00244	.00295
%RSD	4.3079	3.2226	5.4681	2.2694	.11714	2.1370	2.9835	.16507	.31033	3.1884	7.8906	31.671
#1	.08759	2.8311	.00905	.19956	.01031	.02027	1.0565	.04012	3.0384	.00811	.03270	.00724
#2	.09309	2.9632	.00977	.19326	.01029	.01967	1.1021	.04021	3.0251	.00849	.02925	.01142

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01859	.41959	.89793	.10044	.00996	.01787	.01000	.01528	.02537	.01041	.02075	.01440
Stddev	.00435	.02646	.05662	.00141	.00018	.00131	.00039	.00344	.02450	.00064	.00039	.00191
%RSD	23.417	6.3053	6.3053	1.4003	1.8486	7.3100	3.9365	22.503	96.578	6.1208	1.8587	13.252
#1	.01551	4.0088	.85789	.10143	.00983	.01879	.01028	.01771	.04269	.00996	.02048	.01305
#2	.02167	.43830	.93796	.09944	.01009	.01695	.00972	.01285	.00804	.01086	.02103	.01575

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3229.7	56901.	7021.1
Stddev	10.0	263.	126.3
%RSD	.31040	.46295	1.7988
#1	3236.7	56714.	7110.5
#2	3222.6	57087.	6931.8

Sample Name: 280-69842-B-3-A Acquired: 5/30/2015 23:19:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00010	.41327	-.00608	.03356	.01101	-.00008	-.00073	494.12	-.00054
#2	.00043	.41326	-.00589	.03472	.01094	-.00014	.00333	494.47	-.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00055	.00083	.00191	.39465	13.034	.06223	85.065	.04179	-.00233
#2	-.00102	.00071	.00170	.40026	13.096	.06150	84.448	.04179	-.00236
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	404.87	.00489	.09770	.00254	633.51	.00600	.06822	7.0515	15.090
#2	401.72	.00456	.09666	.00423	631.48	.00857	.07681	7.0866	15.165
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00206	12.039	.00196	.01133	-.00675	-.01940	-.00049	.00520	.00236
#2	.00298	11.957	.00305	.01157	-.01398	-.00964	-.00036	.00639	.00364
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2938.5	52217.	6908.9						
#2	2928.1	52202.	6920.7						

Sample Name: 280-69842-B-4-A Acquired: 5/30/2015 23:22:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00034	As1890 ppm .49330	B_2089 ppm .00212	Ba4554 ppm .05707	Be3130 ppm .02222	Bi2230 ppm -.00003	Ca3179 ppm .00264	Cd2288 ppm 399.34
#1	-.00044	.48938	-.00087	.05675	.02217	-.00001	.00171	399.51	-.00048
#2	-.00023	.49723	.00511	.05739	.02227	-.00006	.00358	399.17	-.00074
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00015	Cu3247 ppm .00068	Fe2599 ppm .00033	K_7664 ppm .51914	Li6707 ppm 766.490 {44}	Mg2790 ppm .01285	Mn2576 ppm 51.348	Mo2020 ppm .09595
#1	.00036	.00068	.00025	.51344	5.8875	.01234	51.473	.09648	-.00234
#2	-.00006	.00067	.00040	.52484	5.9574	.01337	51.223	.09543	-.00281
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 111.52	P_1782 ppm .00348	Pb2203 ppm .14426	S_1820 ppm .00204	Sb2068 ppm F 432.94	Se1960 ppm .00324	Si2881 ppm .00744	SiO2 ppm 10.804
#1	112.00	.00336	.14494	.00139	430.64	.00148	.00694	10.746	22.997
#2	111.05	.00360	.14359	.00269	435.25	.00499	.00793	10.862	23.246
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00039	Th2837 ppm W 5.6767	Ti3349 ppm .00186	Tl1908 ppm .01483	U_3701 ppm W -.01153	V_2924 ppm -.02983	Zn2062 ppm -.00021	Zr3391 ppm .03158
#1	.00096	5.7978	.00095	.01449	-.01084	-.02030	-.00025	.03157	.00322
#2	-.00174	5.5557	.00276	.01517	-.01222	-.03936	-.00017	.03160	.00237
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2982.9	Y_3774 Cts/S 53745.	360.073 {94}	377.433 {89}	7035.1	7012.7	2992.9	2972.9
#1	14.1	66.	31.8						
#2	.47409	.12291	.45132						

Sample Name: 280-69842-B-5-A Acquired: 5/30/2015 23:25:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	1.2554	.00664	.15417	.01636	.00003	.00193	364.49	-.00053
Stddev	.00024	.0056	.00219	.00042	.00011	.00001	.00387	2.10	.00031
%RSD	206.60	.44347	32.953	.27101	.64788	38.665	200.59	.57720	58.215
#1	-.00029	1.2593	-.00818	.15446	.01643	.00002	-.00081	365.98	-.00031
#2	.00005	1.2514	-.00509	.15387	.01628	.00003	.00467	363.00	-.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	.00104	.00408	.86380	3.6260	.03773	79.215	.01722	-.00175
Stddev	.00040	.00004	.00065	.00061	.0099	.00058	.192	.00018	.00017
%RSD	68.448	3.8984	16.013	.07013	.27356	1.5323	.24281	1.0175	9.8506
#1	-.00030	.00107	.00362	.86423	3.6190	.03732	79.079	.01710	-.00187
#2	-.00087	.00101	.00454	.86337	3.6330	.03814	79.351	.01735	-.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	497.26	.00302	.04135	.00311	F 671.01	.00514	.14940	11.498	24.607
Stddev	2.99	.00074	.00535	.00032	3.60	.00030	.00313	.009	.018
%RSD	.60119	24.484	12.939	10.185	.53685	5.8107	2.0960	.07484	.07484
#1	499.37	.00354	.04514	.00288	673.56	.00535	.15161	11.505	24.620
#2	495.14	.00249	.03757	.00333	668.46	.00493	.14719	11.492	24.594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	W 10.141	.00056	.02682	W -.01101	.06651	.00016	.00780	.00397
Stddev	.00028	.008	.00058	.00161	.00313	.02416	.00020	.00060	.00029
%RSD	63.704	.07788	103.94	5.9935	28.479	36.322	126.28	7.7263	7.2236
#1	.00024	10.136	.00015	.02568	-.00879	.04943	.00030	.00823	.00418
#2	.00063	10.147	.00097	.02796	-.01322	.08359	.00002	.00738	.00377
Check ?	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2933.5	52352.	7042.8						
Stddev	8.6	129.	68.1						
%RSD	.29189	.24549	.96705						
#1	2939.6	52261.	6994.7						
#2	2927.5	52443.	7091.0						

Sample Name: 280-69842-B-6-A Acquired: 5/30/2015 23:28:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00010	As1890 ppm .01188	B_2089 ppm .00334	Ba4554 ppm .04031	Be3130 ppm .01400	Bi2230 ppm .00006	Ca3179 ppm .00086	Cd2288 ppm .302.68
#1	-.00025	.01145	-.00444	.03997	.01405	-.00002	-.00261	302.34	-.00052
#2	.00006	.01230	-.00224	.04066	.01395	-.00010	.00088	303.02	-.00046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00049	Cu3247 ppm .00106	Fe2599 ppm .00040	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	-.00041	.00077	.00001	.00964	4.3619	.00932	37.793	.00039	-.00272
#2	-.00057	.00135	.00078	.00908	1.1248	.33715	.19866	4.5112	10.473
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 78.029	P_1782 ppm .00329	Pb2203 ppm .03425	S_1820 ppm .00359	Sb2068 ppm F 266.06	Se1960 ppm .00439	Si2881 ppm .01975	SiO2 ppm 7.5091
#1	78.176	.00302	.03113	.00349	266.60	.00429	.02513	7.5270	16.108
#2	77.881	.00357	.03738	.00368	265.53	.00449	.01436	7.4911	16.031
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00059	Th2837 ppm 4.6221	Ti3349 ppm .00189	Tl1908 ppm .00045	U_3701 ppm -00905	V_2924 ppm -.02354	Zn2062 ppm -.00087	Zr3391 ppm .00412
#1	.00048	4.6224	.00177	-.00002	-.00871	-.02409	-.00112	.00400	.00211
#2	.00070	4.6218	.00201	.00093	-.00940	-.02299	-.00063	.00423	.00328
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2960.8	Y_3774 Cts/S 54792.	377.433 {89}					
#1	2974.2	54874.	7172.1						
#2	2947.4	54709.	62.6						
		116.							
		.64184	.21243	.87265					

Sample Name: 280-69842-B-7-A Acquired: 5/30/2015 23:31:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.04961	.00150	.08823	.03315	.00006	.00023	244.98	.00036
Stddev	.00075	.00067	.00007	.00056	.00044	.00009	.00003	.71	.00012
%RSD	1434.7	1.3452	4.5563	.63370	1.3269	136.48	11.246	.28945	33.550
#1	-.00058	.05008	-.00145	.08863	.03346	.00000	-.00025	245.48	-.00028
#2	.00048	.04914	-.00155	.08784	.03284	-.00013	-.00021	244.48	-.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.00309	.00016	.05988	2.4774	.03528	33.144	.00077	.00272
Stddev	.00009	.00001	.00016	.00158	.0274	.00119	.016	.00006	.00040
%RSD	27.906	.41937	99.578	2.6326	1.1081	3.3612	.04676	7.9008	14.621
#1	-.00027	.00308	.00005	.06099	2.4580	.03612	33.133	.00072	.00300
#2	-.00040	.00309	.00027	.05876	2.4968	.03444	33.155	.00081	.00244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	174.95	.00360	.03686	.00298	W 196.64	.00352	.00497	11.581	24.784
Stddev	.76	.00036	.00199	.00106	.23	.00221	.00008	.028	.060
%RSD	.43619	10.021	5.3901	35.640	.11819	62.695	1.6126	.24277	.24277
#1	175.49	.00335	.03546	.00223	196.80	.00196	.00503	11.601	24.827
#2	174.41	.00386	.03827	.00374	196.47	.00508	.00492	11.561	24.742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	4.1006	.00092	.00074	W -.01012	-.00791	.00009	.00070	.00054
Stddev	.00066	.0153	.00251	.00039	.00121	.07464	.00011	.00015	.00145
%RSD	248.28	.37411	272.66	53.245	11.975	943.87	131.35	21.383	270.02
#1	-.00020	4.1114	-.00085	.00101	-.01098	.04487	.00001	.00081	.00156
#2	.00073	4.0897	.00269	.00046	-.00926	-.06069	.00016	.00060	-.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2926.2	52354.	6714.2						
Stddev	3.9	245.	110.8						
%RSD	.13277	.46771	1.6503						
#1	2923.5	52527.	6635.8						
#2	2929.0	52181.	6792.5						

Sample Name: 280-69842-B-8-A Acquired: 5/30/2015 23:34:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279390 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00011	.02514	-.00201	.05003	.01587	-.00013	.00146	266.10	-.00047
#2	.00015	.02557	-.00493	.04939	.01540	-.00005	.00135	266.24	-.00048
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00047	.00172	.00057	.02197	6.2337	.01292	49.569	.00288	-.00319
#2	-.00025	.00170	.00067	.02151	.0166	.00020	.300	.00005	.00059
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	236.60	.00287	.00318	.00385	327.83	.00397	.07792	3.8109	8.1553
#2	233.82	.00293	.00924	.00342	.00363	.00294	.00203	.0293	.0627
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	F 327.83	1.1126	74.016	2.6074	.76830
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00011	6.3553	.00203	.00037	-.01151	-.01620	-.00130	.00803	.00291
#2	.00140	6.3283	.00174	.00105	.00048	.00174	.01653	.00014	.00002
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	W -.01151	102.05	10.735	2.4463	.64909
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2946.9	52112.	6612.5						
#2	2940.8	52285.	6805.1						

Sample Name: 280-69844-M-1-A Acquired: 5/30/2015 23:37:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00025	As1890 ppm .00333	B_2089 ppm .02075	W 14.900 W .008	Ba4554 ppm .27907	Be3130 ppm -.00003	Bi2230 ppm .00222	Ca3179 ppm 372.26	Cd2288 ppm -.00030
#1	-.00044	.00381	.01510	14.894	.27907	-.00006	.00264	371.78	-.00019	
#2	-.00006	.00285	.02639	14.905	.27907	.00000	.00179	372.75	-.00041	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00415	Cu3247 ppm .01337	Fe2599 ppm .00500	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}	
#1	.00414	.01334	.00555	.25766	188.63	.14635	128.34	.13467	.04859	
#2	.00417	.01341	.00445	.25620	188.68	.14539	128.64	.13437	.04843	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1337.4	P_1782 ppm .04576	Pb2203 ppm W 3.5250	S_1820 ppm -.00040	Sb2068 ppm F 262.11	Se1960 ppm .03197	Si2881 ppm .00498	SiO2 ppm 22.703	
#1	1336.9	.04594	3.5011	.00041	262.40	.03251	.00924	22.639	48.447	
#2	1337.9	.04558	3.5489	-.00121	261.82	.03144	.00072	22.767	48.722	
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
					-.20000					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00091	Th2837 ppm 4.1197	Ti3349 ppm .00195	Tl1908 ppm .00072	U_3701 ppm W -.01171	V_2924 ppm -.03183	Zn2062 ppm .01485	Zr3391 ppm .03694	
#1	-.00179	4.1438	.00332	.00083	-.01070	-.02980	.01512	.03776	.00209	
#2	-.00002	4.0956	.00058	.00061	-.01271	-.03386	.01458	.03612	.00229	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2754.3	Y_3774 Cts/S 48989.	377.433 {89}				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}	
#1	2758.4	48933.	6791.8							
#2	2750.3	49045.	6813.7							

Sample Name: 280-69844-M-2-A Acquired: 5/30/2015 23:40:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00004	As1890 ppm .16602	B_2089 ppm .06500	W 16.216	Ba4554 ppm .92195	Be3130 ppm .00000	Bi2230 ppm .00024	Ca3179 ppm 403.45	Cd2288 ppm -.00019
#1	.00012	.16721	.06175	16.250	.92070	.00008	.00225	405.51	.00002	
#2	-.00004	.16484	.06824	16.182	.92320	-.00008	-.00177	401.39	-.00041	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00565	Cu3247 ppm .02715	Fe2599 ppm .00771	K_7664 ppm 25.632	Li6707 ppm W 197.80	Mg2790 ppm .15651	Mn2576 ppm 140.08	Mo2020 ppm 1.1477	ppm .05571
#1	.00533	.02714	.00745	25.639	197.77	.15614	139.64	1.1425	.05584	
#2	.00598	.02716	.00797	25.625	197.83	.15687	140.53	1.1528	.05558	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1194.3	P_1782 ppm .04908	Pb2203 ppm 1.1751	S_1820 ppm .00012	Sb2068 ppm F 275.88	Se1960 ppm .03441	Si2881 ppm .00928	SiO2 ppm 25.076	ppm 53.663
#1	1194.7	.04888	1.1748	.00011	276.61	.03330	.01086	25.140	53.799	
#2	1193.8	.04928	1.1754	.00012	275.15	.03553	.00769	25.013	53.528	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00226	Th2837 ppm 4.6631	Ti3349 ppm .00390	Tl1908 ppm .02565	U_3701 ppm -.00980	V_2924 ppm -.03027	Zn2062 ppm .01946	Zr3391 ppm .03007	ppm .00177
#1	.00209	4.6689	.00310	.02555	-.00958	-.03341	.01930	.02903	.00103	
#2	.00244	4.6572	.00470	.02576	-.01001	-.02713	.01961	.03111	.00252	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2681.7	Y_3774 Cts/S 47918.	377.433 {89}						
#1	2681.5	48159.	6717.9							
#2	2681.9	47677.	6740.8							

Sample Name: 280-69844-M-3-A Acquired: 5/30/2015 23:44:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00018	As1890 ppm .14912	B_2089 ppm .09591	W 20.210	Ba4554 ppm 2.5486	Be3130 ppm -.00012	Bi2230 ppm .00034	Ca3179 ppm 474.49	Cd2288 ppm -.00062
#1	.00063	.14900	.09482	20.201	2.5786	-.00010	-.00014	473.75	-.00064	
#2	-.00026	.14924	.09699	20.219	2.5185	-.00015	.00082	475.24	-.00060	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00687	Cu3247 ppm .03512	Fe2714 ppm .00904	K_7664 ppm 47.315	Li6707 ppm W 446.45	Mg2790 ppm 20897	Mn2576 ppm 177.69	Mo2020 ppm 1.9522	ppm .04536
#1	.00727	.03547	.00852	47.439	451.25	.20988	177.88	1.9551	.04539	
#2	.00648	.03477	.00955	47.191	441.64	.20805	177.50	1.9492	.04534	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 2154.2	P_1782 ppm .05279	Pb2203 ppm .87627	S_1820 ppm .00032	Sb2068 ppm F 251.65	Se1960 ppm .05049	Si2881 ppm .00633	SiO2 ppm 29.203	ppm 62.494
#1	2173.6	.05324	.88282	-.00152	251.79	.04954	.00590	29.677	63.509	
#2	2134.8	.05234	.86972	.00216	251.52	.05144	.00675	28.728	61.479	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 6.2250	Th2837 ppm .00538	Ti3349 ppm .02825	Tl1908 ppm W -.01338	U_3701 ppm W -.07935	V_2924 ppm .01493	Zn2062 ppm .01937	Zr3391 ppm .00119	ppm .00196
#1	.00286	6.1627	.00412	.02822	-.01468	-.07233	.01431	.01967	.00258	
#2	.00530	6.2873	.00663	.02827	-.01208	-.08636	.01555	.01907	-.00019	
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2532.7	Y_3774 Cts/S 37.3	377.433 {89}						
#1	2539.2	44757.	6434.2							
#2	2526.2	44704.	6380.0							

Sample Name: CCVH-3294468 Acquired: 5/30/2015 23:48:20 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	-00738	50.248	-00331	.03111	.00084	.00007	W 1.0788	.04744	-.00009	-.00021	.00052
Stddev	.00050	.429	.00794	.00266	.00002	.00002	.0077	.00531	.00012	.00024	.00009
%RSD	6.7611	.85358	239.72	8.5474	2.0691	35.637	.71143	11.192	134.25	114.17	16.700
#1	-.00702	49.945	-.00892	.03299	.00082	.00008	1.0842	.05120	.00000	-.00039	.00058
#2	-.00773	50.552	.00230	.02923	.00085	.00005	1.0733	.04369	-.00018	-.00004	.00046
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 5.0000%	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00175	48.590	.39592	.00038	.05659	-.00164	-.00054	254.12	.00223	.00868	.00117
Stddev	.00025	.413	.01332	.00210	.00709	.00015	.00009	.11	.00019	.00102	.00099
%RSD	13.994	.84921	3.3648	551.00	12.535	9.2088	17.083	.04521	8.3965	11.755	85.032
#1	-.00192	48.298	.40534	.00187	.06161	-.00153	-.00047	254.04	.00236	.00940	.00047
#2	-.00158	48.881	.38650	-.00111	.05158	-.00175	-.00060	254.20	.00209	.00796	.00187
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	W 5.2863	-.01047	.00788	-.00081	-.00174	-.00151	.00052	5.1638	-.01268	.00140	W 10.826
Stddev	.0453	.00292	.00326	.00676	.01446	.00040	.00004	.0175	.00061	.00280	.025
%RSD	.85761	27.927	41.413	829.04	829.04	26.878	8.5982	.33947	4.7925	200.13	.23431
#1	5.3184	-.01254	0.01019	.00396	.00848	-.00179	.00049	5.1762	-.01311	.00338	10.808
#2	5.2542	-.00840	.00558	-.00559	-.01197	-.00122	.00055	5.1514	-.01225	-.00058	10.844
Check ? Value Range	Chk Warn 5.0000 5.0000%	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00345	-.00062	-.13687								
Stddev	.00025	.00052	.00297								
%RSD	7.2741	83.398	2.1673								
#1	.00363	-.00099	-.13897								
#2	.00328	-.00026	-.13478								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2960.1	51793.	6556.7								
Stddev	9.8	125.	6.5								
%RSD	.33257	.24148	.09874								
#1	2953.2	51705.	6552.2								
#2	2967.1	51882.	6561.3								

Sample Name: CCV-3296664 Acquired: 5/30/2015 23:51:03 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.49400	.54510	1.0391	F .55829	.49508	.47824	-.00058	4.7882	.52711	.51657	.52038	.50855
Stddev	.00007	.00070	.0128	.00337	.00169	.00035	.00083	.0014	.00193	.00257	.00037	.00164
%RSD	.01368	.12804	1.2284	.60305	.34178	.07367	143.99	.02928	.36683	.49730	.07026	.32247
#1	.49404	.54461	1.0301	.55591	.49628	.47849	.00001	4.7892	.52574	.51476	.52012	.50971
#2	.49395	.54560	1.0481	.56067	.49388	.47799	-.00117	4.7872	.52848	.51839	.52064	.50739

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass	Chk Pass	None	Chk Pass				
				10.490%								

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3844	49.495	1.0124	19.246	.51466	.51083	F 5.7183	.50825	1.0820	1.0009	.07570	1.0525
Stddev	.0079	.044	.0014	.054	.00063	.00254	.0130	.00307	.0074	.0069	.02213	.0012
%RSD	.33288	.08959	.13873	.28001	.12316	.49694	.22673	.60326	.68769	.68615	29.236	.11431
#1	2.3900	49.464	1.0114	19.284	.51421	.50904	5.7091	.50608	1.0767	.99603	.09135	1.0516
#2	2.3787	49.527	1.0134	19.208	.51511	.51263	5.7274	.51042	1.0872	1.0057	.06005	1.0533

Check ? Value Range	Chk Pass	Chk Fail 5.0000	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
							10.490%					

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0244	4.8084	10.290	1.0085	.49599	-.00036	.51467	1.0195	-.00357	.52468	.49101	.47909
Stddev	.0083	.0265	.057	.0077	.00059	.00070	.00012	.0074	.01227	.00537	.00142	.00168
%RSD	.81385	.55051	.55051	.76580	.11978	192.40	.02394	.72484	344.22	1.0226	.28924	.35079
#1	1.0185	4.7896	10.250	1.0030	.49641	.00013	.51476	1.0143	-.01224	.52848	.49000	.47790
#2	1.0303	4.8271	10.330	1.0139	.49557	-.00086	.51458	1.0247	.00511	.52089	.49201	.48028

Check ? Value Range	Chk Pass	None	Chk Pass									

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3022.1	53183.	6744.8									
Stddev	16.2	50.	7.2									
%RSD	.53484	.09354	.10681									
#1	3033.5	53218.	6739.7									
#2	3010.6	53148.	6749.9									

Sample Name: CCB Acquired: 5/30/2015 23:53:33 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00020	Al1670 ppm .00131	As1890 ppm -.00021	B_2089 ppm .01638	Ba4554 ppm .00005	Be3130 ppm .00007	Bi2230 ppm .00002	Ca3179 ppm .00236	Cd2288 ppm -.00019	Co2286 ppm .00039	Cr2055 ppm .00008	Cu3247 ppm -.00131	Fe2599 ppm -.00078
#1	.00005	.00026	-.00004	.01544	.00027	.00007	.00020	.00028	-.00026	.00047	.00002	-.00119	-.00039
#2	.00034	.00236	-.00038	.01731	-.00017	.00007	-.00015	.00443	-.00011	.00030	.00013	-.00143	-.00116
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .12580	Li6707 ppm -.00008	Mg2790 ppm .00157	Mn2576 ppm -.00003	Mo2020 ppm .00021	Na5895 ppm .36351	Ni2316 ppm .00024	P_1782 ppm .00223	Pb2203 ppm .00065	S_1820 ppm .07218	Sb2068 ppm -.00060	Se1960 ppm -.00024	Si2881 ppm -.00174
#1	.12652	.00114	.00097	.00001	.00036	.36834	.00050	.00312	-.00020	.05011	-.00043	.00124	.00166
#2	.12507	-.00130	.00216	-.00007	.00007	.35867	-.00002	.00134	.00150	.09426	-.00076	-.00173	-.00514
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.00372	Sn1899 ppm .00000	Sr4077 ppm .00009	Th2837 ppm .00159	Ti3349 ppm .00016	TI1908 ppm -.00067	U_3701 ppm -.02397	V_2924 ppm .00021	Zn2062 ppm .00037	Zr3391 ppm .00182			
#1	.00356	.00001	.00007	.00304	-.00019	-.00136	-.01961	-.00015	-.00006	.00288			
#2	-.01101	.00000	.00011	.00014	.00052	.00002	-.02834	.00057	.00080	.00077			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3055.9	Y_3600 Cts/S 54605.	Y_3774 Cts/S 6757.2										
#1	3059.4	54313.	6762.8										
#2	3052.3	54896.	6751.6										

Sample Name: CCVL3301032 Acquired: 5/30/2015 23:55:57 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00927	.11102	.01136	.12183	.01013	.00097	.10802	.19252	.00533	.01070	.01071	.01457
Stddev	.00009	.00003	.00397	.00222	.00014	.00002	.00051	.00270	.00015	.00031	.00005	.00001
%RSD	.97824	.03104	34.963	1.8235	1.4067	2.1550	.46959	1.4012	2.7324	2.9339	.50106	.06208

#1	.00933	.11104	.01417	.12340	.01023	.00096	.10838	.19062	.00543	.01092	.01075	.01456
#2	.00921	.11100	.00855	.12026	.01003	.00099	.10766	.19443	.00523	.01048	.01067	.01458

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09310	3.1607	.00991	.20488	.01076	.02106	F 1.3565	.04205	3.1610	.00906	.05098	.00989
Stddev	.00005	.0049	.00008	.00332	.00008	.00056	.0027	.00001	.0241	.00058	.00546	.00220
%RSD	.05741	.15465	.84167	1.6214	.78315	2.6352	.19516	.01740	.76330	6.4019	10.712	22.291

#1	.09306	3.1572	.00997	.20253	.01070	.02146	1.3584	.04206	3.1780	.00865	.05485	.00833
#2	.09314	3.1641	.00985	.20723	.01082	.02067	1.3546	.04205	3.1439	.00947	.04712	.01145

Check ? Value Range	Chk Pass	Chk Fail 1.0000	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
							30.000%					

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01559	.46020	.98483	.10426	.01021	.01664	.01071	.01835	.06132	.01118	.02194	.01488
Stddev	.00105	.00391	.00837	.00202	.00005	.00126	.00036	.00237	.02457	.00024	.00069	.00110
%RSD	6.7212	.84958	.84958	1.9358	.51411	7.6005	3.3307	12.919	40.073	2.1187	3.1249	7.4179

#1	.01633	45744	.97891	.10569	.01017	.01754	.01045	.01667	.04394	.01135	.02145	.01410
#2	.01485	.46296	.99074	.10283	.01025	.01575	.01096	.02003	.07869	.01101	.02242	.01566

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3051.2	54131.	6735.1									
Stddev	5.9	233.	64.8									
%RSD	.19403	.42967	.96203									
#1	3047.0	54295.	6689.3									
#2	3055.4	53966.	6780.9									

Sample Name: MB 280-279411/1-A Acquired: 5/30/2015 23:58:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00409	.00208	.01080	.00007	.00003	.00226	.01603	.00019
Stddev	.00002	.00031	.00073	.00114	.00018	.00004	.00091	.01037	.00005
%RSD	16.277	7.4716	35.028	10.524	250.60	124.17	40.354	64.704	25.868
#1	-.00013	.00430	-.00156	.01160	-.00005	.00000	-.00162	.00870	-.00016
#2	-.00017	.00387	-.00259	.00999	.00020	.00006	-.00291	.02337	-.00023
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.00004	-.00090	.00690	.09103	-.00073	-.00051	.00009	.00024
Stddev	.00008	.00038	.00025	.00049	.03110	.00033	.00534	.00006	.00002
%RSD	26.620	904.93	27.309	7.0736	34.169	44.553	1056.7	61.306	7.2571
#1	.00025	.00031	-.00108	.00655	.11303	-.00096	.00327	.00013	.00023
#2	.00036	-.00022	-.00073	.00724	.06904	-.00050	-.00428	.00005	.00025
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30772	-.00096	.00332	-.00064	.04161	-.00117	-.00177	-.03517	-.07526
Stddev	.01433	.00038	.00176	.00016	.00456	.00140	.00201	.00961	.02057
%RSD	4.6558	39.961	53.158	24.817	10.947	120.08	113.38	27.326	27.326
#1	.29759	-.00069	.00207	-.00053	.04483	-.00018	-.00320	-.04197	-.08981
#2	.31785	-.00123	.00456	-.00075	.03839	-.00216	-.00035	-.02837	-.06072
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.00011	.00029	.00026	.00044	-.01880	.00003	.00165	.00219
Stddev	.00035	.00001	.00325	.00031	.00171	.01343	.00035	.00112	.00014
%RSD	43.423	12.456	1123.0	119.77	385.18	71.453	1165.2	67.839	6.4057
#1	.00106	.00010	-.00201	.00048	.00165	-.00930	.00028	.00086	.00209
#2	.00056	.00012	.00259	.00004	-.00076	-.02830	-.00022	.00244	.00229
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3095.2	55076.	6812.3						
Stddev	4.4	312.	6.9						
%RSD	.14098	.56706	.10158						
#1	3092.1	55297.	6817.2						
#2	3098.2	54855.	6807.4						

Sample Name: LCS 280-279411/2-A Acquired: 5/31/2015 0:01:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04560	2.0385	1.0496	F 1.1133	2.0049	.04830	2.1063	46.552	.10755
Stddev	.00006	.0144	.0031	.0059	.0077	.00018	.0101	.084	.00024
%RSD	.13483	.70479	.29297	.53384	.38414	.36236	.48010	.17995	.22102
#1	.04564	2.0284	1.0474	1.1091	2.0103	.04843	2.0991	46.612	.10738
#2	.04555	2.0487	1.0518	1.1175	1.9994	.04818	2.1134	46.493	.10772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.1050 .86000	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50897	F .20298	.25743	.94645	50.451	1.0260	47.798	.51039	1.0641
Stddev	.00318	.00060	.00033	.00587	.002	.0044	.005	.00028	.0037
%RSD	.62431	.29718	.12848	.62044	.00384	.43126	.01120	.05420	.34634
#1	.50673	.20341	.25719	.94229	50.452	1.0291	47.802	.51020	1.0614
#2	.51122	.20256	.25766	.95060	50.449	1.0228	47.794	.51059	1.0667
Check ?	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.984	.50213	F 11.178	.50471	2.1370	W .54995	2.1272	9.4402	20.202
Stddev	.513	.00131	.032	.00149	.0098	.00254	.0162	.0873	.187
%RSD	.95065	.26018	.29034	.29546	.45661	.46136	.76365	.92504	.92504
#1	53.621	.50121	11.155	.50366	2.1301	.54816	2.1157	9.3785	20.070
#2	54.346	.50306	11.201	.50577	2.1439	.55174	2.1387	9.5020	20.334
Check ?	Chk Pass	Chk Pass	Chk Fail 11.100 9.1000	Chk Pass	None	Chk Warn .54000 .44000	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0335	1.0043	1.0318	1.0260	2.0352	2.1487	.52415	.47542	.45781
Stddev	.0057	.0038	.0012	.0008	.0117	.0203	.00131	.00085	.00482
%RSD	.27908	.37652	.11558	.07289	.57285	.94450	.25068	.17860	1.0534
#1	2.0295	1.0069	1.0327	1.0255	2.0270	2.1631	.52322	.47482	.45440
#2	2.0375	1.0016	1.0310	1.0266	2.0434	2.1344	.52508	.47602	.46122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line									
Units	Cts/S	Cts/S	Cts/S						
Avg	2954.4	53048.	6742.1						
Stddev	28.9	79.	53.8						
%RSD	.97944	.14921	.79737						
#1	2974.9	53104.	6780.1						
#2	2933.9	52992.	6704.1						

Sample Name: LCSD 280-279411/3-A Acquired: 5/31/2015 0:03:26 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04482	2.0142	1.0334	1.0937	1.9615	.04707	F 2.0812	45.673	.10554
Stddev	.00006	.0028	.0001	.0015	.0004	.00003	.0063	.002	.00011
%RSD	.14259	.13767	.00594	.13541	.02121	.05455	.30481	.00448	.10741
#1	.04477	2.0122	1.0334	1.0948	1.9618	.04705	2.0856	45.671	.10562
#2	.04486	2.0161	1.0335	1.0927	1.9612	.04709	2.0767	45.674	.10546
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49984	W .19921	.25090	.93187	49.509	1.0024	47.191	.50453	1.0523
Stddev	.00010	.00029	.00380	.00250	.080	.0004	.347	.00409	.0011
%RSD	.02044	.14679	1.5133	.26794	.16069	.04531	.73620	.81091	.10464
#1	.49977	.19941	.24822	.93364	49.566	1.0021	46.945	.50164	1.0531
#2	.49991	.19900	.25359	.93011	49.453	1.0027	47.436	.50743	1.0516
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.535	.49298	W 10.993	.49982	2.1151	.54490	2.1039	9.3593	20.029
Stddev	.116	.00111	.023	.00169	.0055	.00507	.0050	.0486	.104
%RSD	.21680	.22425	.20782	.33795	.25784	.93108	.23963	.51891	.51891
#1	53.617	.49220	11.009	.50101	2.1190	.54849	2.1003	9.3249	19.955
#2	53.453	.49376	10.977	.49863	2.1113	.54131	2.1074	9.3936	20.102
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0115	.98160	1.0172	1.0170	2.0094	2.1250	.51745	.47444	.45372
Stddev	.0014	.00012	.0123	.0099	.0010	.0016	.00266	.00370	.00632
%RSD	.06765	.01198	1.2090	.97572	.04845	.07371	.51380	.78089	1.3933
#1	2.0124	.98152	1.0085	1.0100	2.0088	2.1261	.51557	.47182	.44925
#2	2.0105	.98168	1.0259	1.0240	2.0101	2.1239	.51933	.47706	.45819
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2946.0	52267.	6625.5						
Stddev	6.1	379.	13.3						
%RSD	.20596	.72585	.20033						
#1	2950.3	52535.	6616.1						
#2	2941.7	51999.	6634.9						

Sample Name: 280-69781-N-1-A Acquired: 5/31/2015 0:05:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	.05837	.01348	W 15.578	.35199	-.00008	-.00010	398.63	-.00068
Stddev	.00041	.00068	.00084	.010	.00020	.00010	.00055	2.85	.00025
%RSD	145.80	1.1713	6.2573	.06711	.05609	125.53	545.79	.71556	37.142
#1	-.00001	.05788	.01288	15.586	.35213	-.00015	-.00049	400.65	-.00086
#2	.00057	.05885	.01407	15.571	.35185	-.00001	.00029	396.61	-.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00411	.01538	.00246	1.3952	W 200.21	.15787	137.24	.11216	.04522
Stddev	.00014	.00026	.00027	.0008	.04	.00005	.05	.00031	.00036
%RSD	3.3971	1.6587	11.000	.05717	.02034	.03364	.03440	.27913	.79899
#1	.00401	.01520	.00227	1.3947	200.24	.15783	137.21	.11194	.04497
#2	.00421	.01556	.00265	1.3958	200.19	.15791	137.28	.11239	.04548
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1470.0	.04646	W 2.3953	.00001	F 266.80	.03426	.00272	23.852	51.042
Stddev	.7	.00039	.0043	.00204	.05	.00457	.00038	.119	.254
%RSD	.04426	.83780	.18153	18260.	.01951	13.341	14.109	.49748	.49748
#1	1470.4	.04674	2.3983	-.00143	266.84	.03750	.00245	23.768	50.863
#2	1469.5	.04619	2.3922	.00145	266.77	.03103	.00299	23.936	51.222
Check ?	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit	11.000		-1.0000						
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00112	4.4404	.00253	.00638	W -.01069	W -.05492	.00298	.08338	.00292
Stddev	.00163	.0034	.00248	.00011	.00090	.06292	.00016	.00118	.00089
%RSD	145.74	.07577	98.139	1.7679	8.4082	114.55	5.5319	1.4184	30.427
#1	.00003	4.4428	.00428	.00630	-.01133	-.09941	.00309	.08422	.00355
#2	-.00227	4.4380	.00077	.00646	-.01006	-.01043	.00286	.08255	.00230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2640.7	46545.	6389.3						
Stddev	5.2	98.	53.0						
%RSD	.19799	.20971	.82939						
#1	2637.0	46614.	6426.7						
#2	2644.4	46476.	6351.8						

Sample Name: 280-69781-N-1-A SD@5 Acquired: 5/31/2015 0:09:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00059	As1890 ppm .01230	B_2089 ppm .00381	Ba4554 ppm .07243	Be3130 ppm .00005	Bi2230 ppm .00185	Ca3179 ppm 82.171	Cd2288 ppm -.00006
#1	-.00060	.01174	.00000	3.3102	.07216	.00009	.00288	81.915	.00004
#2	-.00058	.01286	.00761	3.3274	.07270	.00002	.00082	82.428	-.00017
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00069	Cu3247 ppm .00371	Fe2599 ppm -.00018	K_7664 ppm .28423	Li6707 ppm 39.503	Mg2790 ppm .02879	Mn2576 ppm 28.276	Mo2020 ppm .02277
#1	.00047	.00382	-.00037	.28045	39.329	.02717	28.182	.02265	.00795
#2	.00092	.00361	.00001	.28800	39.676	.03042	28.369	.02288	.00783
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 292.86	P_1782 ppm .01250	Pb2203 ppm .46630	S_1820 ppm .00535	Sb2068 ppm 51.989	Se1960 ppm .00620	Si2881 ppm .00387	SiO2 ppm 4.6087
#1	292.36	.01236	.46607	.00572	51.832	.00719	.00397	4.5731	9.7865
#2	293.35	.01264	.46654	.00498	52.146	.00521	.00376	4.6442	9.9386
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00200	Th2837 ppm .89564	Ti3349 ppm .00070	Tl1908 ppm -.00123	U_3701 ppm -.00914	V_2924 ppm -.02437	Zn2062 ppm .00070	Zr3391 ppm .01759
#1	.00270	.89312	.00025	.00130	-.00997	.00383	.00110	.01774	.00102
#2	.00131	.89816	.00116	.00115	-.00830	-.05256	.00030	.01744	.00181
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2902.7	Y_3774 Cts/S 51574.	377.433 {89}					
#1	2902.7	51617.	6615.8	61.	17.5				
#2	2902.7	51531.	6603.4	.26525					

Sample Name: 280-69781-N-1-B MS Acquired: 5/31/2015 0:11:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.04877	1.8868	2.7686	1.1061	16.030	2.3099	.04640	2.0964	424.17
#2	.04831	1.8765	2.6942	1.1059	15.994	2.3065	.04667	2.0907	427.36
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}
#1	.10933	.47215	.18939	.26283	2.1867	242.76	1.2061	174.91	.59062
#2	.10911	.47244	.18777	.26118	2.1873	241.84	1.2005	174.06	.58805
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	1.0685	1463.5	.49852	14.104	.44711	260.12	.59706	2.2473	29.442
#2	1.0696	1461.9	.49712	14.055	.44485	259.02	.59501	2.2253	29.360
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	63.007	1.8784	4.9895	1.0152	1.0161	1.6474	2.0335	.52104	.52474
#2	62.830	1.8642	5.3080	1.0149	1.0136	1.6540	2.0475	.52200	.52854
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.44042								
#2	.43719								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69781-N-1-B MS Acquired: 5/31/2015 0:11:49 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279411 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.0	47345.	6488.1
Stddev	5.5	197.	12.1
%RSD	.20560	.41672	.18659
#1	2662.9	47206.	6496.7
#2	2655.1	47485.	6479.6

Sample Name: 280-69781-N-1-C MSD Acquired: 5/31/2015 0:14:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04950	Al3092 ppm 1.9020	As1890 W 2.8002	B_2089 ppm 1.1374	Ba4554 W 16.888	Be3130 ppm 2.3635	Bi2230 F 2.1444	Ca3179 ppm 442.12
#1	.04987	1.8960	2.7788	1.1335	16.857	2.3762	.04755	2.1395	439.99
#2	.04913	1.9081	2.8216	1.1413	16.920	2.3508	.04690	2.1494	444.24
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 ppm .11059	Cr2055 ppm .47883	Cu3247 W 19355	Fe2599 ppm .26812	K_7664 ppm 2.2658	Li6707 ppm W 253.31	Mg2790 ppm 1.2365	Mn2576 ppm 179.96
#1	.11024	.47821	.19366	.26827	2.2641	254.33	1.2438	180.53	.59796
#2	.11095	.47945	.19345	.26797	2.2675	252.29	1.2292	179.38	.59627
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 ppm 1.0947	Ni2316 ppm W 1542.4	P_1782 ppm .50521	Pb2203 ppm W 14.418	S_1820 ppm .45035	Sb2068 ppm F 274.07	Se1960 ppm .61354	Si2881 ppm 2.2714
#1	1.0941	1549.0	.50440	14.384	.44883	273.75	.61166	2.2660	30.640
#2	1.0954	1535.9	.50602	14.453	.45187	274.39	.61542	2.2768	30.525
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 ppm 65.447	Sr4077 ppm 1.8816	Th2837 ppm W 5.4662	Ti3349 ppm 1.0308	Tl1908 ppm 1.0320	U_3701 ppm 1.6601	V_2924 ppm 2.1107	Zn2062 ppm .52683
#1	65.570	1.8838	5.4363	1.0341	1.0329	1.6556	2.1417	.52729	.52786
#2	65.324	1.8793	5.4961	1.0276	1.0311	1.6646	2.0797	.52637	.52304
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}	ppm .44976	ppm .00372	ppm .82627	ppm 1.0320	ppm 1.6601	ppm 2.1107	ppm .52683	ppm .52545
#1	.45239								
#2	.44714								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69781-N-1-C MSD Acquired: 5/31/2015 0:14:54 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279411 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2674.0	47805.	6634.7
Stddev	5.1	173.	28.8
%RSD	.19215	.36223	.43380
#1	2677.7	47682.	6655.1
#2	2670.4	47927.	6614.4

Sample Name: 280-69781-N-2-A Acquired: 5/31/2015 0:18:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279411 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00003	As1890 ppm .04615	B_2089 ppm .01810	W 15.615	Ba4554 ppm .36941	Be3130 ppm .00000	Bi2230 ppm .00184	Ca3179 ppm 382.22	Cd2288 ppm -.00038
#1	.00010	.04651	.01689	15.598	.37115	.00006	.00010	386.85	-.00026	
#2	-.00016	.04578	.01930	15.633	.36766	-.00006	.00358	377.59	-.00050	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00405	Cu3247 ppm .01558	Fe2599 ppm .00169	K_7664 ppm 1.2949	Li6707 ppm W 194.90	Mg2790 ppm .15364	Mn2576 ppm 131.40	Mo2020 ppm .10233	ppm .04332
#1	.00407	.01562	.00151	1.2917	195.73	.15467	131.54	.10190	.04347	
#2	.00404	.01554	.00186	1.2981	194.06	.15261	131.27	.10275	.04317	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1400.4	P_1782 ppm .04565	Pb2203 ppm 1.7385	S_1820 ppm .00179	Sb2068 ppm F 265.45	Se1960 ppm .03730	Si2881 ppm .00964	SiO2 ppm 22.445	ppm 48.032
#1	1406.4	.04534	1.7331	.00072	264.98	.03719	.01057	22.356	47.842	
#2	1394.4	.04595	1.7439	.00286	265.93	.03741	.00871	22.534	48.223	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00071	Th2837 ppm 4.3575	Ti3349 ppm .00282	Tl1908 ppm .00429	U_3701 ppm W -.01055	V_2924 ppm .00372	Zn2062 ppm .03371	Zr3391 ppm .00191	
#1	.00199	4.3459	.00211	.00442	-.01159	-.06120	.00332	.03294	.00165	
#2	-.00057	4.3692	.00353	.00415	-.00950	-.05543	.00411	.03448	.00218	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2662.2	Y_3774 Cts/S 47890.	360.073 {94}	377.433 {89}	6680.5	292.402 {115}	206.200 {163}	339.198 {99}	Zr3391 ppm 0.0037
#1	2660.5	47924.	6645.6							
#2	2664.0	47857.	6715.4							

Sample Name: CCVH-3294468 Acquired: 5/31/2015 0:22:00 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00696	Al3092 ppm 49.386	As1890 ppm -00099	B_2089 ppm .04002	Ba4554 ppm .00106	Be3130 ppm .00021	Bi2230 ppm W 1.0818	Ca3179 ppm .26914	Cd2288 ppm .00000	Co2286 ppm -.00041	Cr2055 ppm .00065
#1	-.00680	49.676	-.00110	.04144	.00097	.00023	1.0775	.34471	-.00001	-.00030	.00062
#2	-.00711	49.096	-.00089	.03860	.00115	.00019	1.0860	.19357	.00002	-.00051	.00069
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 5.0000%	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00202	Fe2714 ppm 47.649	K_7664 ppm .54916	Li6707 ppm .00170	Mg2790 ppm .13137	Mn2576 ppm -.00141	Mo2020 ppm -.00038	Na8183 ppm 256.26	Ni2316 ppm .00250	P_1782 ppm .00772	Pb2203 ppm .00168
#1	-.00225	47.669	.58465	.00162	.19030	-.00119	-.00013	256.49	.00267	.00726	.00073
#2	-.00179	47.628	.51367	.00177	.07243	-.00163	-.00062	256.04	.00233	.00817	.00263
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm W 5.3378	Sb2068 ppm -.01284	Se1960 ppm .00675	Si2881 ppm .00886	SiO2 ppm .01896	Sn1899 ppm -.00055	Sr4077 ppm .00301	Th2837 ppm 5.1025	Ti3349 ppm -.01209	TI1908 ppm .00149	U_3701 ppm W 10.774
#1	5.3149	-.01206	0.01014	.03362	.07195	-.00021	.00386	5.0794	-.01173	.00139	10.832
#2	5.3608	-.01362	.00337	-.01590	-.03403	-.00089	.00215	5.1257	-.01246	.00160	10.715
Check ? Value Range	Chk Warn 5.0000 5.0000%	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00378	Zn2062 ppm -.00061	Zr3391 ppm -.13647								
#1	.00361	.00044	-.13535								
#2	.00395	-.00165	-.13759								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2971.5	Y_3600 Cts/S 52833.	Y_3774 Cts/S 6742.0								
#1	2962.8	53086.	6742.0								
#2	2980.3	52579.	6742.1								

Sample Name: CCV-3296664 Acquired: 5/31/2015 0:24:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.50037	F .56961	1.0435	F .57112	.49576	.47575	.00132	4.6944	.53489	.51778	.51866	.52079
Stddev	.00067	.02037	.0172	.00487	.00181	.00162	.00101	.0047	.00064	.00505	.00408	.00121
%RSD	.13301	3.5763	1.6466	.85195	.36515	.33999	75.946	.09961	.11969	.97570	.78677	.23194
#1	.50084	.55521	1.0313	.56768	.49704	.47690	.00061	4.6977	.53443	.51421	.51577	.52165
#2	.49990	.58402	1.0556	.57456	.49448	.47461	.00203	4.6911	.53534	.52135	.52154	.51994
Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3728	49.729	1.0179	19.265	.51410	.51189	F 5.8490	.51015	1.0820	1.0058	.06081	1.0685
Stddev	.0427	.027	.0007	.021	.00110	.00540	.3755	.00456	.0084	.0098	.00006	.0079
%RSD	1.7990	.05499	.07227	.11094	.21357	1.0545	6.4197	.89421	.77308	.97586	.09752	.73726
#1	2.4029	49.749	1.0184	19.280	.51488	.50807	6.1145	.50692	1.0761	.99889	.06086	1.0629
#2	2.3426	49.710	1.0174	19.250	.51332	.51570	5.5835	.51337	1.0879	1.0128	.06077	1.0740
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 5.0000 10.490%	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0409	4.6140	9.8740	1.0161	.49639	-.00025	.51536	1.0300	.01109	.52525	.48598	.47636
Stddev	.0008	.0283	.0606	.0091	.00128	.00419	.00133	.0089	.02164	.00371	.00237	.00248
%RSD	.08133	.61395	.61395	.89147	.25726	1673.5	.25860	.86036	195.08	.70645	.48788	.52166
#1	1.0415	4.5940	9.8312	1.0097	.49729	-.00321	.51630	1.0237	.02639	.52262	.48766	.47460
#2	1.0403	4.6341	9.9169	1.0225	.49549	.00271	.51441	1.0363	-.00421	.52787	.48430	.47811
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3009.2	53723.	6751.7									
Stddev	5.6	112.	30.9									
%RSD	.18695	.20775	.45735									
#1	3013.2	53644.	6773.5									
#2	3005.2	53802.	6729.9									

Sample Name: CCB Acquired: 5/31/2015 0:27:12 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	-0.0001	.01164	.00347	.02231	.00019	.00023	.00106	.00860	.00005	.00026	.00006	-0.0104
Stddev	.00018	.00257	.00379	.00047	.00039	.00023	.00261	.00700	.00018	.00011	.00004	.00005
%RSD	2926.1	22.039	109.30	2.1098	210.95	102.20	245.90	81.417	361.70	42.035	66.031	5.1895
#1	.00012	.01345	.00079	.02265	.00046	.00039	-.00078	.01355	.00018	.00018	.00009	-.00100
#2	-.00014	.00983	.00614	.02198	-.00009	.00006	.00291	.00365	-.00008	.00034	.00003	-.00108
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.01141	.20042	-.00002	-.00227	-.00006	.00036	F .52467	-.00008	.00079	.00068	.04107	.00025
Stddev	.01577	.03072	.00036	.00026	.00001	.00012	.11762	.00042	.00070	.00085	.00251	.00082
%RSD	138.22	15.329	1721.6	11.655	25.859	33.423	22.418	521.41	88.909	125.25	6.1014	333.85
#1	.02256	.22215	.00023	-.00209	-.00005	.00028	.60784	.00022	.00129	.00008	.04284	.00082
#2	.00026	.17870	-.00027	-.00246	-.00007	.00045	.44149	-.00038	.00029	.00128	.03930	-.00033
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Fail .50000 -.50000	Chk Pass								
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00007	-.02197	-.04702	.00042	.00025	.00251	.00067	.00052	-.02412	-.00004	-.00027	.00186
Stddev	.00182	.01098	.02350	.00027	.00030	.00103	.00003	.00253	.02218	.00018	.00069	.00049
%RSD	2646.7	49.990	49.990	64.275	121.52	41.081	3.9367	487.62	91.963	470.02	253.56	26.407
#1	.00136	-.01420	-.03040	.00023	.00046	.00178	.00069	.00231	-.00844	.00009	-.00075	.00221
#2	-.00122	-.02974	-.06364	.00061	.00003	.00324	.00065	-.00127	-.03980	-.00016	.00021	.00151
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	3024.5	53921.	6708.3									
Stddev	4.9	158.	9.8									
%RSD	.16147	.29374	.14596									
#1	3028.0	53809.	6715.2									
#2	3021.1	54033.	6701.4									

Sample Name: CCVL3301032II Acquired: 5/31/2015 0:29:35 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01000	.11379	.01351	F .13239	.01070	.00125	.11200	.24741	.00547	.01100	.01075	.01510
Stddev	.00030	.00066	.00048	.00081	.00059	.00019	.00207	.07459	.00006	.00025	.00002	.00002
%RSD	3.0088	.57954	3.5807	.61469	5.5148	15.015	1.8463	30.149	1.1457	2.2974	.22120	.10818

#1	.01021	.11332	.01385	.13182	.01028	.00111	.11054	.19467	.00543	.01117	.01077	.01511
#2	.00979	.11425	.01317	.13297	.01111	.00138	.11346	.30016	.00552	.01082	.01073	.01509

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 30.000%	Chk Pass							
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10970	3.2665	.01159	.20562	.01084	.02031	F 1.6634	.04232	3.2253	.00842	.04673	.00736
Stddev	.02332	.0846	.00073	.00084	.00012	.00000	.3100	.00033	.0116	.00161	.00180	.00283
%RSD	21.256	2.5906	6.2602	.40837	1.0780	.02180	18.637	.79027	.35895	19.173	3.8452	38.447

#1	.09321	3.2066	.01107	.20622	.01093	.02031	1.4442	.04255	3.2171	.00956	.04546	.00536
#2	.12619	3.3263	.01210	.20503	.01076	.02030	1.8826	.04208	3.2334	.00728	.04800	.00936

Check ? Value Range	Chk Pass	Chk Fail 1.0000 30.000%	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01780	.44386	.94985	.10531	.01116	.01896	.01065	.01500	F .03068	.01129	.02083	.01530
Stddev	.00240	.01966	.04208	.00140	.00129	.00065	.00048	.00161	.00879	.00017	.00012	.00031
%RSD	13.486	4.4302	4.4302	1.3275	11.545	3.4465	4.5261	10.742	28.654	1.4862	.57707	2.0069

#1	.01949	42995	.92010	.10432	.01025	.01850	.01100	.01386	.03690	.01117	.02092	.01551
#2	.01610	.45776	.97961	.10630	.01208	.01942	.01031	.01614	.02446	.01141	.02075	.01508

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3017.7	53883.	6717.1									
Stddev	3.9	65.	139.5									
%RSD	.12982	.12143	2.0771									

#1	3020.5	53836.	6815.7									
#2	3014.9	53929.	6618.4									

Sample Name: MB 280-279426/1-A Acquired: 5/31/2015 0:32:16 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:
 Comment: 279426 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00402	.00063	F .01666	.00042	.00003	-.00234	.01906	-.00009
Stddev	.00042	.00171	.00686	.00075	.00015	.00017	.00068	.00694	.00005
%RSD	581.30	42.605	1085.2	4.5264	34.378	566.23	29.153	36.392	53.647
#1	.00037	.00523	.00548	.01720	.00032	-.00009	-.00282	.02397	-.00005
#2	-.00022	.00281	-.00422	.01613	.00053	.00015	-.00185	.01416	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	F -.00014	-.00134	.00965	.14631	-.00130	.00489	.00007	.00027
Stddev	.00026	.00011	.00034	.00206	.03065	.00065	.00293	.00007	.00013
%RSD	329.73	78.095	25.409	21.339	20.949	50.085	59.798	97.428	49.526
#1	-.00027	-.00022	-.00159	.01111	.16798	-.00176	.00282	.00012	.00037
#2	.00011	-.00006	-.00110	.00820	.12463	-.00084	.00696	.00002	.00018
Check ?	Chk Pass	Chk Fail .01000 -.00010	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .43100	-.00014	.00291	-.00118	F .03820	-.00282	-.00044	F -.02106	-.04506
Stddev	.03991	.00010	.00493	.00091	.00677	.00097	.00044	.02045	.04376
%RSD	9.2603	72.952	169.61	77.776	17.730	34.590	99.084	97.104	97.104
#1	.45923	-.00007	.00639	-.00053	.04299	-.00213	-.00076	-.03551	-.07600
#2	.40278	-.00021	-.00058	-.00182	.03341	-.00351	-.00013	-.00660	-.01412
Check ?	Chk Warn .05054 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000 -.01000	Chk Pass	Chk Pass	Chk Fail .01000 -.01000	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00029	W .00216	.00007	-.00034	-.00426	-.00030	.00144	.00134
Stddev	.00144	.00011	.00117	.00015	.00111	.02582	.00027	.00003	.00141
%RSD	390.45	36.411	54.354	207.34	326.79	606.78	92.632	1.8581	105.61
#1	.00139	.00037	.00299	.00018	.00045	.01400	-.00010	.00146	.00234
#2	-.00065	.00022	.00133	-.00003	-.00113	-.02252	-.00049	.00143	.00034
Check ?	Chk Pass	Chk Pass	Chk Warn .00000 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3047.2	54722.	6764.9						
Stddev	2.4	107.	7.5						
%RSD	.07918	.19521	.11111						
#1	3048.9	54646.	6759.6						
#2	3045.5	54798.	6770.2						

Sample Name: LCS 280-279426/2-A Acquired: 5/31/2015 0:34:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0123	As1890 ppm 1.0452	B_2089 F 1.1140	Ba4554 455.403 { 74}	Be3130 ppm .04748	Bi2230 ppm 2.1204	Ca3179 ppm 45.708	Cd2288 ppm .10662
#1	.04525	2.0173	1.0469	1.1165	1.9900	.04719	2.1222	45.478	.10710
#2	.04575	2.0074	1.0435	1.1115	2.0059	.04777	2.1187	45.938	.10614
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.1050 .86000	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F .20241	Cu3247 ppm .25790	Fe2599 ppm .97736	K_7664 766.490 { 44}	Li6707 ppm 1.0258	Mg2790 ppm 47.816	Mn2576 ppm .51025	Mo2020 ppm 1.0640
#1	.50826	.20234	.25765	.97853	50.091	1.0243	47.878	.50942	1.0656
#2	.50475	.20248	.25816	.97619	50.532	1.0272	47.754	.51108	1.0624
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 { 41}	Ni2316 ppm .49818	P_1782 ppm F 11.130	Pb2203 ppm .50443	S_1820 ppm 2.1366	Sb2068 ppm W .55226	Se1960 ppm 2.1298	Si2881 ppm 9.2074	SiO2 ppm 19.704
#1	54.471	.49961	11.143	.50623	2.1476	.55728	2.1341	9.2235	19.738
#2	53.975	.49675	11.117	.50262	2.1255	.54725	2.1255	9.1913	19.669
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Fail 11.100 9.1000	Chk Pass	None	Chk Warn .54000 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .99672	Th2837 ppm 1.0406	Ti3349 ppm 1.0304	Tl1908 ppm 2.0333	U_3701 ppm 2.1593	V_2924 ppm .52472	Zn2062 ppm .47109	Zr3391 ppm .44834
#1	2.0396	.99262	1.0381	1.0288	2.0375	2.1388	.52457	.47265	.45015
#2	2.0246	1.0008	1.0430	1.0320	2.0290	2.1798	.52486	.46954	.44652
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2953.9	Y_3774 Cts/S 52654.	377.433 { 89}					
#1	2944.4	52745.	6734.0						
#2	2963.4	52563.	6652.4						

Sample Name: LCSD 280-279426/3-A Acquired: 5/31/2015 0:37:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0450	As1890 ppm 1.0644	B_2089 F 1.1400	Ba4554 455.403 { 74}	Be3130 ppm .04832	Bi2230 ppm 2.1637	Ca3179 ppm 46.543	Cd2288 ppm .10902
#1	.04533	2.0437	1.0616	1.1384	2.0296	.04848	2.1620	46.545	.10880
#2	.04625	2.0463	1.0671	1.1415	2.0237	.04815	2.1653	46.541	.10924
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.1050 .86000	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F .20581	Cu3247 ppm .26204	Fe2599 ppm .93586	K_7664 766.490 { 44}	Li6707 ppm 1.0409	Mg2790 ppm 48.312	Mn2576 ppm .51731	Mo2020 ppm 1.0832
#1	.51291	.20621	.26175	.93001	51.194	1.0404	48.438	.51935	1.0805
#2	.51485	.20541	.26232	.94172	51.085	1.0415	48.185	.51527	1.0859
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 { 41}	Ni2316 ppm .50655	P_1782 ppm F 11.382	Pb2203 ppm .51349	S_1820 ppm 2.1877	Sb2068 ppm F .56353	Se1960 ppm 2.1846	Si2881 ppm 9.4355	SiO2 ppm 20.192
#1	54.832	.50570	11.368	.51333	2.1810	.56205	2.1795	9.4010	20.118
#2	55.144	.50740	11.395	.51365	2.1944	.56501	2.1897	9.4700	20.266
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Fail 11.100 9.1000	Chk Pass	None	Chk Fail .55499 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 1.0131	Th2837 ppm 1.0509	Ti3349 ppm 1.0451	Tl1908 ppm 2.0783	U_3701 ppm 2.2080	V_2924 ppm .53304	Zn2062 ppm .47828	Zr3391 ppm .45656
#1	2.0660	1.0147	1.0535	1.0471	2.0796	2.1883	.53469	.48133	.45366
#2	2.0745	1.0114	1.0483	1.0431	2.0770	2.2276	.53139	.47524	.45946
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 53067.	Y_3774 Cts/S 6660.6						
#1	2968.9	53005.	6636.6						
#2	2959.0	53129.	6684.6						

Sample Name: 280-69781-N-1-D Acquired: 5/31/2015 0:39:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00043	As1890 ppm .06000	B_2089 ppm .01787	W 16.350	Ba4554 ppm .36400	Be3130 ppm .00001	Bi2230 ppm .00014	Ca3179 ppm 398.32	Cd2288 ppm -.00036
#1	-.00036	.06248	.01777	16.320	.36599	.00002	.00281	402.41	-.00052	
#2	-.00051	.05752	.01796	16.380	.36201	.00000	-.00253	394.24	-.00021	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00407	Cu3247 ppm .01592	Fe2599 ppm .00332	K_7664 ppm 1.3884	Li6707 ppm W 205.39	Mg2790 ppm .16497	Mn2576 ppm 138.39	Mo2020 ppm .11308	ppm .04774
#1	.00437	.01595	.00336	1.3951	206.43	.16720	137.58	.11314	.04816	
#2	.00376	.01590	.00328	1.3817	204.36	.16273	139.19	.11301	.04731	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1511.4	P_1782 ppm .04709	Pb2203 ppm W 2.4990	S_1820 ppm .00134	Sb2068 ppm F 280.59	Se1960 ppm .03575	Si2881 ppm .01073	SiO2 ppm 23.997	ppm 51.353
#1	1515.3	.04730	2.4991	.00191	280.21	.03601	.00960	24.044	51.454	
#2	1507.4	.04687	2.4989	.00076	280.98	.03549	.01186	23.949	51.251	
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
11.000			-1.0000		-.20000					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00038	Th2837 ppm 4.4868	Ti3349 ppm .00229	Tl1908 ppm .00697	U_3701 ppm -.00764	V_2924 ppm -.00975	Zn2062 ppm .00479	Zr3391 ppm .08234	ppm .00178
#1	.00272	4.4955	.00306	.00795	-.00730	.00118	.00527	.08284	.00127	
#2	-.00195	4.4781	.00151	.00599	-.00797	-.02067	.00430	.08183	.00229	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2663.8	Y_3774 Cts/S 47689.	377.433 {89}						
#1	2662.5	47847.	6564.5							
#2	2665.1	47532.	6610.8							

Sample Name: 280-69781-N-1-D SD@5 Acquired: 5/31/2015 0:42:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00051	As1890 ppm .01465	B_2089 ppm .00524	Ba4554 ppm .34305	Be3130 ppm .07423	Bi2230 ppm .00000	Ca3179 ppm .00253	Cd2288 ppm .82.767	
#1	-.00040	.01423	.00386	3.4404	.07400	-.00007	-.00003	82.736	.00001	
#2	-.00061	.01508	.00661	3.4207	.07445	.00007	.00508	82.797	-.00012	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00087	Cu3247 ppm .00414	Fe2599 ppm .00033	K_7664 ppm .28193	Li6707 ppm .40.509	Mg2790 ppm .03174	Mn2576 ppm .28.858	Mo2020 ppm .02322	
#1	.00076	.00417	.00031	.28225	40.411	.03224	28.858	.02305	.00807	
#2	.00098	.00411	.00035	.28161	40.606	.03124	28.858	.02339	.00817	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 301.27	P_1782 ppm .01287	Pb2203 ppm .49057	S_1820 ppm .00289	Sb2068 ppm .53.637	Se1960 ppm .00554	Si2881 ppm .00472	SiO2 ppm .4.6652	
#1	300.80	.01296	.49197	.00393	53.802	.00710	.00862	4.6720	9.9981	
#2	301.74	.01279	.48916	.00185	53.473	.00398	.00083	4.6584	9.9690	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00157	Th2837 ppm .91804	Ti3349 ppm -.00017	Tl1908 ppm .00133	U_3701 ppm -.00699	V_2924 ppm -.01352	Zn2062 ppm .00000	Zr3391 ppm .01720	
#1	.00109	.91672	-.00192	.00107	-.00635	-.00659	.00042	.01699	.00254	
#2	.00205	.91936	.00157	.00158	-.00764	-.02045	-.00043	.01742	.00129	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2908.4	Y_3774 Cts/S 51910.	377.433 {89}						
#1	2904.4	52088.	6790.0							
#2	2912.4	51731.	6782.8							

Sample Name: 280-69781-N-1-E MS Acquired: 5/31/2015 0:45:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05049	1.9099	W 2.8097	1.1576	W 17.397	2.3606	.04672	F 2.2039	430.78
Stddev	.00047	.0029	.0171	.0012	.033	.0144	.00009	.0062	5.47
%RSD	.92769	.15428	.60718	.10130	.18856	.61134	.18317	.27991	1.2698
#1	.05083	1.9120	2.7976	1.1585	17.373	2.3504	.04666	2.2082	426.91
#2	.05016	1.9078	2.8217	1.1568	17.420	2.3708	.04678	2.1995	434.65
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11345	.48469	W .19348	.27057	2.2199	W 254.36	1.2419	181.76	.60665
Stddev	.00016	.00069	.00035	.00080	.0015	1.76	.0094	.01	.00003
%RSD	.14359	.14226	.17834	.29416	.06833	.69103	.75739	.00287	.00555
#1	.11334	.48518	.19372	.27001	2.2210	253.12	1.2352	181.76	.60663
#2	.11357	.48420	.19323	.27113	2.2188	255.61	1.2485	181.77	.60668
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1012	W 1553.2	.51237	W 14.815	.45749	F 281.21	.62301	2.3329	30.244
Stddev	.0013	6.7	.00159	.039	.00006	.37	.00061	.0081	.223
%RSD	.11723	.43238	.31010	.26372	.01288	.13263	.09761	.34850	.73723
#1	1.1002	1548.4	.51125	14.788	.45745	280.95	.62258	2.3272	30.087
#2	1.1021	1557.9	.51350	14.843	.45754	281.48	.62344	2.3387	30.402
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.723	1.9046	W 5.4506	1.0475	1.0374	1.6937	2.1136	.53806	.52667
Stddev	.477	.0104	.0611	.0005	.0003	.0016	.0247	.00085	.00297
%RSD	.73723	.54527	1.1213	.04505	.02475	.09497	1.1680	.15745	.56417
#1	64.385	1.8972	5.4073	1.0478	1.0376	1.6949	2.1310	.53866	.52457
#2	65.060	1.9119	5.4938	1.0472	1.0372	1.6926	2.0961	.53746	.52877
Check ?	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.44104								
Stddev	.00556								
%RSD	1.2610								
#1	.43711								
#2	.44497								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69781-N-1-E MS Acquired: 5/31/2015 0:45:31 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279426 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2645.3	47819.	6718.5
Stddev	6.5	187.	15.3
%RSD	.24487	.39025	.22747
#1	2649.9	47951.	6729.3
#2	2640.7	47687.	6707.7

Sample Name: 280-69781-N-1-F MSD Acquired: 5/31/2015 0:48:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04991	1.9143	W 2.8117	1.1566	W 17.370	2.3796	.04699	F 2.1828	437.10
Stddev	.00030	.0038	.0029	.0000	.046	.0096	.00005	.0011	3.60
%RSD	.60826	.19708	.10295	.00123	.26298	.40323	.10352	.05006	.82462
#1	.05012	1.9170	2.8138	1.1566	17.402	2.3863	.04703	2.1836	439.64
#2	.04970	1.9116	2.8097	1.1566	17.338	2.3728	.04696	2.1820	434.55
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11290	.48680	W .19302	.27431	2.2297	W 256.99	1.2523	183.62	.60921
Stddev	.00024	.00034	.00003	.00065	.0124	.88	.0033	.14	.00129
%RSD	.20820	.07033	.01650	.23539	.55404	.34244	.26556	.07856	.21134
#1	.11306	.48656	.19305	.27477	2.2385	257.61	1.2547	183.72	.60830
#2	.11273	.48704	.19300	.27385	2.2210	256.37	1.2500	183.52	.61012
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1062	W 1575.6	.51346	W 14.733	.45980	F 281.43	.62469	2.3302	30.462
Stddev	.0002	6.0	.00046	.038	.00109	.47	.00012	.0006	.143
%RSD	.02146	.38045	.09001	.25933	.23608	.16638	.01916	.02464	.47048
#1	1.1063	1579.8	.51379	14.760	.46057	281.77	.62460	2.3298	30.564
#2	1.1060	1571.4	.51313	14.706	.45904	281.10	.62477	2.3306	30.361
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	65.189	1.9251	W 5.5115	1.0486	1.0449	1.7025	2.1212	.53662	.52778
Stddev	.307	.0016	.0468	.0008	.0010	.0003	.0160	.00215	.00008
%RSD	.47048	.08338	.84870	.07475	.09076	.01708	.75328	.40009	.01441
#1	65.406	1.9240	5.4784	1.0491	1.0456	1.7023	2.1099	.53510	.52772
#2	64.972	1.9263	5.5446	1.0480	1.0442	1.7027	2.1325	.53814	.52783
Check ?	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.44379								
Stddev	.00295								
%RSD	.66392								
#1	.44588								
#2	.44171								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69781-N-1-F MSD Acquired: 5/31/2015 0:48:35 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279426 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2633.3	47384.	6635.4
Stddev	2.0	130.	58.8
%RSD	.07650	.27427	.88639
#1	2631.9	47476.	6593.8
#2	2634.7	47292.	6677.0

Sample Name: 280-69781-N-2-B Acquired: 5/31/2015 0:52:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	.04523	.01151	W 15.493	.36597	.00006	-.00176	372.79	-.00030
Stddev	.00039	.00147	.00035	.009	.00104	.00009	.00065	3.81	.00032
%RSD	165.16	3.2511	3.0358	.05877	.28397	144.87	37.233	1.0222	107.54
#1	.00004	.04627	.01126	15.499	.36523	.00013	-.00129	370.09	-.00053
#2	-.00051	.04419	.01175	15.486	.36670	.00000	-.00222	375.48	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00388	.01566	.00249	1.2578	W 194.07	.15278	130.63	.10139	.04236
Stddev	.00004	.00009	.00029	.0035	.25	.00069	.45	.00026	.00032
%RSD	.99669	.54852	11.574	.27934	.13025	.45397	.34371	.26102	.75443
#1	.00391	.01560	.00229	1.2553	193.89	.15229	130.94	.10121	.04259
#2	.00386	.01573	.00269	1.2603	194.25	.15327	130.31	.10158	.04214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1394.9	.04477	1.7271	-.00025	F 262.87	.03313	.00167	22.099	47.291
Stddev	3.1	.00085	.0060	.00401	.64	.00523	.00058	.085	.182
%RSD	.22532	1.8968	.35026	1625.0	.24222	15.773	34.577	.38401	.38401
#1	1392.7	.04537	1.7228	.00259	263.32	.02943	.00208	22.039	47.162
#2	1397.1	.04416	1.7314	-.00309	262.42	.03682	.00126	22.159	47.419
Check ?	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	4.3030	.00328	.00492	-.00660	-.02989	.00276	.03318	.00275
Stddev	.00081	.0091	.00170	.00038	.00135	.01489	.00025	.00120	.00059
%RSD	66.280	.21076	51.972	7.7091	20.522	49.837	9.1594	3.6040	21.463
#1	.00179	4.2966	.00207	.00465	-.00756	-.01935	.00294	.03234	.00233
#2	.00065	4.3094	.00448	.00519	-.00564	-.04042	.00259	.03403	.00317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2732.4	48931.	6728.8						
Stddev	2.9	236.	13.0						
%RSD	.10510	.48314	.19326						
#1	2734.4	48764.	6719.6						
#2	2730.4	49098.	6738.0						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 0:55:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	-.00713	47.169	.00290	.03974	.00081	.00020	1.0307	.23621	-.00004	-.00031	.00073	-.00257	45.377
Stddev	.00016	.137	.00303	.00232	.00020	.00012	.0117	.05954	.00022	.00008	.00005	.00001	.040
%RSD	2.2989	.29048	104.35	5.8318	25.290	58.580	1.1317	25.208	563.93	26.459	7.2176	.31739	.08746
#1	-.00724	47.266	.00504	.04138	.00095	.00029	1.0225	.27831	-.00020	-.00025	.00076	-.00256	45.349
#2	-.00701	47.072	.00076	.03810	.00066	.00012	1.0390	.19410	.00012	-.00037	.00069	-.00257	45.405
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.51453	-.00012	.08063	.00161	-.00049	244.43	.00228	.01169	.00194	5.0379	-.01032	.00714	.00111
Stddev	.03010	.00020	.00503	.00009	.00057	.45	.00050	.00112	.00064	.0523	.00144	.00264	.01835
%RSD	5.8494	163.08	6.2439	5.5253	115.77	.18212	22.082	9.5994	32.988	1.0381	13.990	36.933	1658.4
#1	.53582	.00002	.08419	-.00168	-.00009	244.74	.00264	.01090	.00239	5.0009	-.01134	.00527	.01408
#2	.49325	-.00027	.07707	-.00155	-.00089	244.11	.00192	.01248	.00149	5.0748	-.00930	.00900	-.01187
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.00237	-.00209	.00258	4.8876	-.01102	.00070	10.427	.00323	-.00022	-.13237			
Stddev	.03927	.00029	.00053	.0193	.00059	.00084	.064	.00005	.00059	.00112			
%RSD	1658.4	14.057	20.497	.39596	5.3337	120.73	.61763	1.6257	264.89	.84705			
#1	.03014	-.00188	.00295	4.8739	-.01060	.00129	10.472	.00319	.00019	-.13158			
#2	-.02540	-.00230	.00220	4.9013	-.01143	.00010	10.381	.00327	-.00064	-.13316			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3076.8	54873.	6934.6										
Stddev	10.0	80.	17.2										
%RSD	.32511	.14599	.24864										
#1	3069.7	54930.	6922.4										
#2	3083.9	54816.	6946.7										

Sample Name: CCV-3296664 Acquired: 5/31/2015 0:58:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .47718	Al1670 ppm .53978	As1890 ppm 1.0207	B_2089 ppm F .56819	Ba4554 ppm .47493	Be3130 ppm .45108	Bi2230 ppm -.00014	Ca3179 ppm F 4.4319	Cd2288 ppm .52116	Co2286 ppm .50579	Cr2055 ppm .52281	Cu3247 ppm .49799
#1	.47586	.54214	1.0226	.56971	.47534	.45136	.00238	4.4404	.52367	.50599	.52206	.49739
#2	.47849	.53742	1.0188	.56667	.47451	.45080	-.00265	4.4235	.51866	.50560	.52356	.49859
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Fail 5.0000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm F 2.2118	K_7664 ppm 47.907	Li6707 ppm .98282	Mg2790 ppm 18.327	Mn2576 ppm .49462	Mo2020 ppm .50067	Na5895 ppm 5.4572	Ni2316 ppm .49787	P_1782 ppm 1.0756	Pb2203 ppm .97910	S_1820 ppm .04575	Sb2068 ppm 1.0577
#1	2.2064	47.879	.98506	18.296	.49367	.50038	5.4499	.49856	1.0738	.97637	.04695	1.0598
#2	2.2172	47.935	.98057	18.358	.49557	.50096	5.4646	.49718	1.0773	.98183	.04455	1.0555
Check ? Value Range	Chk Fail 2.5000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm 1.0252	Si2881 ppm F 4.3789	SiO2 ppm 9.3708	Sn1899 ppm .98935	Sr4077 ppm .47542	Th2837 ppm .00400	Ti3349 ppm .49563	TI1908 ppm 1.0138	U_3701 ppm .00480	V_2924 ppm .50678	Zn2062 ppm .46579	Zr3391 ppm .45524
#1	1.0225	4.3792	9.3714	.99234	.47555	.00569	49608	1.0169	.00767	.51075	.46364	45656
#2	1.0279	4.3786	9.3702	.98636	.47528	.00230	.49519	1.0106	.00192	.50281	.46794	.45391
Check ? Value Range	Chk Pass	Chk Fail 5.0000 -10.490%	Chk Fail 10.700 -10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3107.6	Y_3600 Cts/S 55460.	Y_3774 Cts/S 7042.0									
#1	3096.7	55420.	7024.4									
#2	3118.5	55499.	7059.7									

Sample Name: CCB Acquired: 5/31/2015 1:00:52 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.0003	.00091	.00207	.02470	.00075	.00090	.00030	.01141	-.00015	.00049	-.00004	-.00114	.00479
Stddev	.00006	.00063	.00310	.00023	.00007	.00015	.00195	.00363	.00017	.00034	.00009	.00017	.00208
%RSD	191.98	68.709	149.52	.92042	8.9671	16.451	654.57	31.848	114.12	69.590	246.51	14.661	43.465
#1	-.00007	.00136	.00427	.02486	.00070	.00101	.00167	.00884	-.00027	.00073	.00003	-.00102	.00627
#2	.00001	.00047	-.00012	.02454	.00080	.00080	-.00108	.01398	-.00003	.00025	-.00010	-.00126	.00332

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.24688	.00155	.01139	.00026	.00060	.44335	.00000	.00476	.00081	.04136	-.00106	-.00269	-.01525
Stddev	.05519	.00088	.00489	.00023	.00055	.01441	.0003	.00137	.00007	.00012	.00054	.00291	.00323
%RSD	22.355	57.116	42.904	90.946	91.598	3.2500	12326.	28.733	9.0618	.28401	51.174	108.05	21.165
#1	.28590	.00217	.01485	.00042	.00099	.43316	.00018	.00379	.00076	.04144	-.00145	-.00475	-.01297
#2	.20786	.00092	.00793	.00009	.00021	.45354	-.00018	.00572	.00086	.04128	-.00068	-.00064	-.01753

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.03264	.00066	.00093	.00230	.00073	.00176	-.00350	.00092	-.00040	.00322			
Stddev	.00691	.00007	.00011	.00073	.00003	.00013	.00084	.00027	.00020	.00035			
%RSD	21.165	10.009	12.245	31.869	3.7726	7.3206	24.003	29.383	48.684	10.865			
#1	-.02775	.00062	.00101	.00282	.00075	.00167	-.00290	.00073	-.00026	.00298			
#2	-.03752	.00071	.00085	.00179	.00071	.00185	-.00409	.00111	-.00054	.00347			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3138.0	56695.	6978.2										
Stddev	2.9	160.	82.3										
%RSD	.09160	.28133	1.1795										
#1	3136.0	56582.	7036.4										
#2	3140.0	56808.	6920.0										

Sample Name: CCVL3301032 Acquired: 5/31/2015 1:03:14 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00903	.10819	.01550	F .13136	.00972	.00104	.10733	.18685	.00523	.01062	.01073	.01438
Stddev	.00035	.00115	.00272	.00057	.00003	.00007	.00189	.00631	.00008	.00012	.00019	.00003
%RSD	3.8321	1.0605	17.557	.43414	.26000	6.7165	1.7635	3.3767	1.5459	1.1201	1.7731	.22937
#1	.00927	.10738	.01358	.13096	.00970	.00109	.10599	.18239	.00529	.01053	.01059	.01441
#2	.00878	.10901	.01743	.13176	.00974	.00099	.10867	.19132	.00517	.01070	.01086	.01436

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 30.000%	Chk Pass							

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08887	3.1316	.00877	.19626	.01033	.01988	F 1.3809	.04088	3.0906	.00954	.04582	F .00645
Stddev	.00309	.0125	.00066	.00402	.00010	.00009	.0248	.00034	.0078	.00125	.01194	.00394
%RSD	3.4750	.39931	7.4970	2.0487	.99666	.46449	1.7946	.82716	.25376	13.106	26.056	61.122
#1	.08669	3.1228	.00924	.19342	.01025	.01981	1.3634	.04112	3.0962	.00865	.03738	.00366
#2	.09105	3.1405	.00831	.19911	.01040	.01994	1.3984	.04064	3.0851	.01042	.05426	.00924

Check ? Value Range	Chk Pass	Chk Fail 1.0000 30.000%	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .01000 -30.000%					

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01681	.40734	.87171	.09987	.00992	.01684	.01016	.01729	.05400	.01084	.02034	.01563
Stddev	.00072	.00077	.00165	.00063	.00010	.00120	.00030	.00026	.02674	.00026	.00016	.00138
%RSD	4.2534	.18895	.18895	.63505	1.0138	7.1402	2.9273	1.5061	49.521	2.4008	.80943	8.8122
#1	.01631	40788	.87287	.09942	.00985	.01769	.01037	.01711	.03509	.01065	.02046	.01466
#2	.01732	.40680	.87054	.10032	.00999	.01599	.00995	.01747	.07291	.01102	.02022	.01661

Check ? Value Range	Chk Pass											

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3127.8	56626.	7023.5									
Stddev	4.9	197.	19.9									
%RSD	.15615	.34722	.28264									
#1	3131.3	56765.	7037.5									
#2	3124.4	56487.	7009.5									

Sample Name: 280-69844-L-1-A Acquired: 5/31/2015 1:05:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00015	As1890 ppm .00343	B_2089 ppm .02409	W 15.111 W 15.111	Ba4554 ppm .28271	Be3130 ppm .00004	Bi2230 ppm .00217	Ca3179 ppm 367.61	Cd2288 ppm -.00023
#1	.00004	.00385	.02553	15.110	.28176	.00003	.00061	367.18	-.00013	
#2	-.00034	.00302	.02266	15.111	.28366	.00006	.00373	368.04	-.00033	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00470	Cu3247 ppm .01381	Fe2599 ppm .00380	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}	
#1	.00484	.01381	.00396	.23905	193.56	.15106	128.82	.13812	.04952	
#2	.00455	.01381	.00364	.24051	194.29	.15182	128.71	.13744	.05040	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1378.2	P_1782 ppm .04644	Pb2203 ppm W 3.6271	S_1820 ppm .00016	Sb2068 ppm F 262.65	Se1960 ppm .03343	Si2881 ppm .00574	SiO2 ppm 22.538	
#1	1373.5	.04631	3.6239	.00005	262.94	.03268	.00092	22.385	47.904	
#2	1382.8	.04658	3.6302	.00027	262.36	.03417	.01055	22.690	48.558	
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
					-1.0000					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00056	Th2837 ppm 4.1980	Ti3349 ppm .00213	Tl1908 ppm .00032	U_3701 ppm -.00764	V_2924 ppm -.03720	Zn2062 ppm .01604	Zr3391 ppm .03700	
#1	.00235	4.1845	.00185	.00048	-.00692	-.03066	.01658	.03712	.00017	
#2	-.00122	4.2115	.00242	.00016	-.00837	-.04373	.01549	.03689	.00255	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2731.8	Y_3774 Cts/S 48799.	377.433 {89}	6721.3	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	
#1	2731.4	48680.	6708.6							
#2	2732.1	48918.	6734.0							

Sample Name: 280-69844-L-2-A Acquired: 5/31/2015 1:09:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00002	As1890 ppm .15287	B_2089 ppm .06232	W 16.052	Ba4554 ppm .92561	Be3130 ppm .00000	Bi2230 ppm .00162	Ca3179 ppm 391.38	Cd2288 ppm -.00017
#1	-.00081	.15239	.06488	16.041	.92580	.00011	-.00287	387.99	-.00013	
#2	.00076	.15335	.05975	16.063	.92542	-.00012	-.00037	394.78	-.00021	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00543	Cu3247 ppm .02649	Fe2599 ppm .00730	K_7664 ppm 24.796	Li6707 ppm W 199.13	Mg2790 ppm .15920	Mn2576 ppm 137.52	Mo2020 ppm 1.1300	ppm .05615
#1	.00538	.02685	.00729	24.840	199.48	.15799	137.70	1.1302	.05668	
#2	.00547	.02613	.00731	24.752	198.78	.16042	137.34	1.1297	.05561	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.000 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1212.9	P_1782 ppm .04838	Pb2203 ppm 1.2001	S_1820 ppm -.00050	Sb2068 ppm F 269.16	Se1960 ppm .03504	Si2881 ppm .01002	SiO2 ppm 24.411	ppm 52.239
#1	1214.5	.04901	1.2172	-.00085	268.95	.03619	.01318	24.380	52.172	
#2	1211.4	.04775	1.1829	-.00015	269.38	.03389	.00686	24.442	52.305	
Check ? High Limit Low Limit	Chk Warn 500.000 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.000 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00386	Th2837 ppm 4.6299	Ti3349 ppm .00665	Tl1908 ppm .02581	U_3701 ppm W -.01228	V_2924 ppm W -.06038	Zn2062 ppm .02050	Zr3391 ppm .02923	ppm .00228
#1	.00319	4.6553	.00627	.02594	-.01351	-.06201	.02058	.02925	.00228	
#2	.00452	4.6044	.00703	.02568	-.01105	-.05875	.02043	.02922	.00229	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.00000 -.01000	Chk Warn 45.00000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2692.8	Y_3774 Cts/S 48260.	360.073 {94}	377.433 {89}					
#1	2698.2	48171.	6672.6							
#2	2687.5	48350.	6704.4							

Sample Name: 280-69844-L-3-A Acquired: 5/31/2015 1:13:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00054	As1890 ppm .07649	B_2089 ppm .05013	W 17.849 W .00949	Ba4554 ppm 1.3397	Be3130 ppm -.00001	Bi2230 ppm .00309	Ca3179 ppm 488.39	Cd2288 ppm -.00079
#1	-.00053	.07629	.04342	17.852	1.3395	.00003	.00239	481.96	-.00062	
#2	-.00055	.07669	.05684	17.847	1.3398	-.00005	.00379	494.82	-.00096	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00373	Cu3247 ppm .02084	Fe2599 ppm .00592	K_7664 ppm 19.491	Li6707 ppm W 267.62	Mg2790 ppm .15912	Mn2576 ppm 169.60	Mo2020 ppm 1.4478	ppm .03812
#1	.00346	.02092	.00548	19.518	267.79	.15985	169.85	1.4469	.03815	
#2	.00399	.02076	.00637	19.463	267.45	.15840	169.35	1.4487	.03809	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.000 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1440.7	P_1782 ppm .04560	Pb2203 ppm .74357	S_1820 ppm .00031	Sb2068 ppm F 276.58	Se1960 ppm .02951	Si2881 ppm .00541	SiO2 ppm 24.408	ppm 52.233
#1	1440.6	.04586	.74927	.00029	276.86	.02789	.00826	24.380	52.174	
#2	1440.8	.04535	.73787	.00034	276.29	.03112	.00256	24.436	52.292	
Check ? High Limit Low Limit	Chk Warn 500.000 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.000 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00146	Th2837 ppm 4.9416	Ti3349 ppm .00563	Tl1908 ppm .01388	U_3701 ppm W -.01202	V_2924 ppm -.03514	Zn2062 ppm .00769	Zr3391 ppm .00939	ppm -.00047
#1	.00164	4.8297	.00498	.01409	-.01439	-.05425	.00816	.00985	.00053	
#2	.00129	5.0535	.00628	.01367	-.00964	-.01604	.00722	.00894	-.00147	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.00000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2649.6	Y_3774 Cts/S 47036.	377.433 {89}	377.433 {89}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	ppm ppm ppm ppm ppm
#1	2648.1	46986.	6424.9							
#2	2651.1	47085.	6349.2							

Sample Name: CCVH-3294468 Acquired: 5/31/2015 1:17:09 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00678	Al3092 ppm 48.391	As1890 ppm -.00094	B_2089 ppm .05453	Ba4554 ppm .00083	Be3130 ppm .00025	Bi2230 ppm 1.0493	Ca3179 ppm .06965	Cd2288 ppm -.00027	Co2286 ppm -.00030	Cr2055 ppm .00086
#1	-.00677	48.401	-.00285	.05105	.00082	.00025	1.0627	.03964	-.00005	-.00037	.00082
#2	-.00679	48.381	.00097	.05801	.00084	.00025	1.0359	.09965	-.00048	-.00022	.00089
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00291	Fe2714 ppm 46.002	K_7664 ppm .42071	Li6707 ppm .00030	Mg2790 ppm .06270	Mn2576 ppm -.00166	Mo2020 ppm -.00062	Na8183 ppm 251.78	Ni2316 ppm .00276	P_1782 ppm .00656	Pb2203 ppm .00113
#1	-.00271	45.956	.42525	-.00030	.06882	-.00161	-.00073	252.07	.00201	.00957	.00126
#2	-.00311	46.047	.41617	.00091	.05659	-.00170	-.00051	251.49	.00350	.00356	.00100
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.2195	Sb2068 ppm -.01196	Se1960 ppm .00503	Si2881 ppm -.01590	SiO2 ppm -.03403	Sn1899 ppm -.00035	Sr4077 ppm .00076	Th2837 ppm 5.0288	Ti3349 ppm -.01167	TI1908 ppm .00117	U_3701 ppm W 10.511
#1	5.1974	-.01470	.00522	-.01317	-.02819	.00038	.00053	5.0308	-.01166	.00383	10.454
#2	5.2416	-.00922	.00484	-.01863	-.03987	-.00107	.00100	5.0267	-.01169	-.00149	10.568
Check ? Value Range	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%
Elem Units Avg Stddev %RSD	V_2924 ppm .00348	Zn2062 ppm .00003	Zr3391 ppm -.13961								
#1	.00342	-.00014	-.13904								
#2	.00354	.00020	-.14017								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2936.7	Y_3600 Cts/S 51686.	Y_3774 Cts/S 6349.7								
#1	2932.0	51721.	6347.2								
#2	2941.4	51650.	6352.3								

Sample Name: CCV-3296664 Acquired: 5/31/2015 1:19:49 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.48337	.53597	1.0104	F .56559	.48001	.45578	.00177	4.8871	.51958	.50439	.50205	.49463
Stddev	.00362	.00477	.0075	.00171	.00384	.00346	.00076	.4356	.00286	.00094	.00042	.00316
%RSD	.74983	.88907	.74567	.30274	.80014	.75917	43.069	8.9130	.55057	.18601	.08359	.63810
#1	.48594	.53934	1.0158	.56680	.47729	.45333	.00231	5.1951	.52160	.50505	.50235	.49686
#2	.48081	.53260	1.0051	.56438	.48272	.45823	.00123	4.5791	.51756	.50373	.50175	.49239

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Pass				
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.2784	49.144	.99431	18.837	.50819	.49638	F 6.5701	.49658	1.0609	.97927	.04380	1.0323
Stddev	.0457	.050	.00821	.096	.00278	.00056	1.4835	.00029	.0020	.00285	.00068	.0067
%RSD	2.0059	.10097	.82578	.50931	.54666	.11285	22.579	.05766	.18526	.29148	1.5479	.65407
#1	2.3107	49.109	.98850	18.905	.51016	.49598	7.6190	.49679	1.0595	.98129	.04428	1.0371
#2	2.2461	49.179	1.0001	18.769	.50623	.49677	5.5211	.49638	1.0623	.97725	.04332	1.0276

Check ? Value Range	Chk Pass	Chk Fail 5.0000 10.490%	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.99810	4.5833	9.8084	.99303	.48215	.00080	.50413	1.0028	-.02809	.51896	.49681	.45890
Stddev	.01094	.0620	.1327	.00000	.00031	.00108	.00377	.0088	.00043	.00781	.00342	.00414
%RSD	1.0961	1.3526	1.3526	.00007	.06413	134.13	.74785	.88020	1.5199	1.5049	.68897	.90297
#1	1.0058	4.5395	9.7145	.99303	.48237	.00004	.50679	1.0091	-.02840	.52448	.49923	.45597
#2	.99036	4.6272	9.9022	.99303	.48193	.00157	.50146	.99659	-.02779	.51343	.49439	.46183

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2981.3	52501.	6351.5									
Stddev	5.9	26.	10.0									
%RSD	.19873	.04935	.15746									
#1	2977.1	52519.	6358.6									
#2	2985.5	52482.	6344.5									

Sample Name: CCB Acquired: 5/31/2015 1:22:17 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	-.00014	.00600	.00207	.03054	.00074	.00021	.00166	F .13477	-.00007	-.00003	.00014	-.00142
Stddev	.00012	.00152	.00105	.00187	.00030	.00007	.00166	.16195	.00007	.00019	.00025	.00029
%RSD	84.818	25.390	50.503	6.1276	40.006	32.967	100.17	120.17	101.69	553.03	179.55	20.686

#1	-.00022	.00707	.00133	.03186	.00053	.00016	.00284	.02025	-.00002	.00010	.00031	-.00121
#2	-.00005	.00492	.00281	.02922	.00095	.00026	.00048	.24929	-.00012	-.00016	-.00004	-.00163

Check ?	Chk Pass	Chk Fail .05000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass						
High Limit												
Low Limit												

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.01466	.22684	-.00085	.00166	-.00002	.00034	F .80679	.00023	.00592	-.00059	.07864	-.00194
Stddev	.02024	.09668	.00002	.00469	.00006	.00028	.52737	.00003	.00472	.00094	.01342	.00049
%RSD	138.08	42.620	2.2005	282.88	362.53	81.186	65.366	11.543	79.647	159.05	17.065	25.433
#1	.00035	.15848	-.00086	-.00166	-.00006	.00015	.43389	.00024	.00926	-.00126	.08813	-.00159
#2	.02897	.29520	-.00083	.00497	.00003	.00054	1.1797	.00021	.00259	.00007	.06915	-.00229

Check ?	Chk Pass	Chk Fail .50000 -.50000	Chk Pass									
High Limit												
Low Limit												

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.00216	.00496	.01061	-.00040	.00162	.00376	.00071	.00068	-.03000	.00032	-.00033	.00177
Stddev	.00428	.00420	.00900	.00065	.00178	.00197	.00009	.00172	.00301	.00035	.00036	.00014
%RSD	197.96	84.814	84.814	162.86	110.00	52.456	12.224	253.52	10.025	111.57	107.92	7.9399
#1	.00086	.00793	.01697	-.00085	.00036	.00236	.00077	.00189	-.02788	.00057	-.00059	.00167
#2	-.00518	.00198	.00425	.00006	.00288	.00515	.00064	-.00054	-.03213	.00007	-.00008	.00187

Check ?	Chk Pass											
High Limit												
Low Limit												

Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Units												
Avg	3030.0	53475.	6413.7									
Stddev	8.4	56.	.9									
%RSD	.27664	.10473	.01380									
#1	3024.1	53514.	6414.3									
#2	3035.9	53435.	6413.1									

Sample Name: CCVL3301032 Acquired: 5/31/2015 1:24:39 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00947	.11129	.01425	F .13566	.01012	.00106	.10679	.18235	.00528	.01052	.01059	.01386
Stddev	.00047	.00311	.00336	.00149	.00026	.00009	.00037	.00196	.00011	.00000	.00002	.00020
%RSD	4.9582	2.7931	23.561	1.0984	2.5930	8.1009	34267	1.0724	2.0484	.03844	.18119	1.4501
#1	.00980	.10909	.01663	.13460	.00993	.00112	.10705	.18373	.00521	.01053	.01060	.01400
#2	.00914	.11349	.01188	.13671	.01031	.00100	.10653	.18097	.00536	.01052	.01057	.01372

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 30.000%	Chk Pass							
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08825	3.1092	.01055	.21983	.01066	.02042	F 1.3962	.04101	3.1372	.00856	.05120	.00946
Stddev	.00099	.0471	.00049	.00839	.00001	.00036	.0007	.00023	.0121	.00236	.02364	.00023
%RSD	1.1232	1.5155	4.6198	3.8156	.11814	1.7656	.05053	.57238	.38624	27.585	46.174	2.4163
#1	.08895	3.1425	.01089	.22576	.01067	.02017	1.3957	.04118	3.1286	.00689	.03449	.00930
#2	.08755	3.0759	.01020	.21390	.01065	.02068	1.3967	.04085	3.1458	.01023	.06792	.00962

Check ? Value Range	Chk Pass	Chk Fail 1.0000 30.000%	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass					
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01564	.42712	.91404	.10169	.00997	.01848	.01059	.01653	.05493	.01092	.02098	.01472
Stddev	.00172	.01274	.02726	.00129	.00006	.00132	.00008	.00034	.01509	.00054	.00015	.00127
%RSD	10.970	2.9820	2.9820	1.2678	.59198	7.1617	.72458	2.0548	27.467	4.9807	.69500	8.6322
#1	.01443	43613	.93332	.10260	.01001	.01941	.01065	.01629	.04426	.01054	.02088	.01382
#2	.01685	.41812	.89477	.10078	.00992	.01754	.01054	.01677	.06560	.01131	.02109	.01562

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3017.1	53389.	6426.6									
Stddev	17.9	117.	62.7									
%RSD	.59260	.21961	.97530									
#1	3004.4	53306.	6470.9									
#2	3029.7	53472.	6382.2									

Sample Name: MB 280-279424/1-A Acquired: 5/31/2015 1:27:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00003	As1890 ppm .00435	B_2089 ppm .00238	Ba4554 ppm .02269	Be3130 ppm .00041	Bi2230 ppm .00007	Ca3179 ppm .00023	Cd2288 ppm .01382
#1	.00098	.00375	.00215	.02239	.00036	.00012	-.00052	.01982	-.00029
#2	-.00105	.00496	.00262	.02298	.00046	.00002	.00006	.00782	-.00028
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00017	Cu3247 ppm F -.00020	Fe2599 ppm .00145	K_7664 ppm .00278	Li6707 ppm .11022	Mg2790 ppm -.00144	Mn2576 ppm .00044	Mo2020 ppm W .00027
#1	.00011	-.00032	-.00122	.00414	.12578	-.00138	-.00391	.00026	-.00017
#2	.00022	-.00009	-.00169	.00141	.09465	-.00150	.00479	.00029	-.00027
Check ? High Limit Low Limit	Chk Pass	Chk Fail .01000 -.00010	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00023 -.00500	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm W .36776	P_1782 ppm -.00008	Pb2203 ppm .00300	S_1820 ppm -.00060	Sb2068 ppm F .03952	Se1960 ppm W -.00622	Si2881 ppm -.00022	SiO2 ppm F -.03030
#1	.37461	-.00022	.00415	-.00025	.03637	-.00574	-.00206	-.02432	-.05205
#2	.36091	.00007	.00185	-.00095	.04268	-.00670	.00162	-.03628	-.07764
Check ? High Limit Low Limit	Chk Warn .05054 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000 -.01000	Chk Warn .00500 -.00500	Chk Pass	Chk Fail .01000 -.01000	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00022	Th2837 ppm .00014	Ti3349 ppm W .00317	Tl1908 ppm -.00036	U_3701 ppm -.00148	V_2924 ppm -.02679	Zn2062 ppm .00052	Zr3391 ppm .00238
#1	-.00017	.00016	.00228	.00055	-.00071	-.04507	.00069	.00263	.00046
#2	-.00027	.00012	.00406	.00016	-.00224	-.00851	.00035	.00213	.00169
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .00000 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3070.7	Y_3774 Cts/S 54190.	377.433 {89}				Zn2062 ppm .00238	Zr3391 ppm .00108
#1	3069.6	54076.	6569.7						
#2	3071.8	54304.	6595.3						

Sample Name: LCS 280-279424/2-A Acquired: 5/31/2015 1:29:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04426	1.9870	1.0197	1.0938	1.9260	.04560	2.0586	F 43.734	.10524
Stddev	.00082	.0097	.0057	.0075	.0003	.00018	.0074	.095	.00002
%RSD	1.8507	.48725	.55633	.68961	.01564	.38936	.35976	.21760	.01979
#1	.04368	1.9801	1.0157	1.0884	1.9263	.04572	2.0534	43.801	.10526
#2	.04483	1.9938	1.0237	1.0991	1.9258	.04547	2.0639	43.667	.10523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail 55.500 44.750	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49271	F 19668	.25077	F .87487	49.389	.99960	46.698	.50155	1.0301
Stddev	.00295	.00064	.00128	.01012	.093	.00190	.011	.00016	.0027
%RSD	.59873	.32344	.50870	1.1563	.18917	.19050	.02344	.03224	.26138
#1	.49062	.19623	.24987	.88202	49.323	.99825	46.691	.50144	1.0282
#2	.49480	.19713	.25167	.86771	49.455	1.0009	46.706	.50167	1.0320
Check ?	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Fail 1.1500 .89000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.882	.48630	10.930	.49115	2.0709	.53774	2.0891	F 8.8723	18.987
Stddev	.020	.00203	.038	.00380	.0239	.00734	.0192	.0088	.019
%RSD	.03736	.41649	.35160	.77387	1.1566	1.3655	.91681	.09903	.09903
#1	53.868	.48487	10.903	.48846	2.0539	.53255	2.0755	8.8661	18.973
#2	53.896	.48773	10.958	.49384	2.0878	.54293	2.1026	8.8785	19.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail 11.000 9.0000	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9794	.96061	1.0136	1.0056	1.9973	2.1041	.51761	.46488	.43104
Stddev	.0126	.00030	.0010	.0022	.0105	.0114	.00141	.00601	.00022
%RSD	.63439	.03145	.09750	.21653	.52539	.54310	.27273	1.2931	.05208
#1	1.9705	.96040	1.0129	1.0071	1.9898	2.1122	.51861	.46913	.43120
#2	1.9883	.96083	1.0143	1.0041	2.0047	2.0960	.51661	.46063	.43088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2952.0	52186.	6490.4						
Stddev	5.0	176.	40.9						
%RSD	.16905	.33796	.63056						
#1	2955.5	52310.	6461.5						
#2	2948.5	52061.	6519.3						

Sample Name: 280-69708-E-1-A @50 Acquired: 5/31/2015 1:32:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00061	.00791	.00180	2.9073	.00169	.00009	-.00172	13.845	-.00027
#2	.00036	.00750	-.00102	2.9681	.00138	.00005	-.00040	13.924	.00013
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00114	.00063	-.00171	.30199	.51288	.00418	18.513	.07278	.00055
#2	.00133	.00005	-.00131	.30819	.51027	.00280	18.538	.07332	.00078
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	1.0089	.00643	.00378	-.00119	21.076	-.00158	.02502	.44771	.95810
#2	1.0276	.00762	-.00036	.00270	21.112	.00225	.02719	.44383	.94980
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00839	.04756	.00476	.00051	.00051	-.02348	.00030	.01322	.00230
#2	.00728	.04806	.00302	.00047	-.00241	-.01674	-.00025	.01334	.00134
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3006.4	53414.	6489.4						
#2	3017.5	53838.	6486.0						

Sample Name: 69708-E-1-A SD@250 Acquired: 5/31/2015 1:34:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.00316	.00136	.60679	.00024	.00007	.00029	2.8954	-.00023
Stddev	.00035	.00009	.00047	.00109	.00052	.00007	.00019	.0124	.00004
%RSD	123.87	2.7162	34.193	.18040	218.66	89.082	67.025	.42888	15.369
#1	-.00052	.00310	.00103	.60756	-.00013	.00003	.00043	2.8866	-.00026
#2	-.00003	.00322	.00169	.60602	.00060	.00012	.00015	2.9042	-.00021
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.00014	-.00128	.13248	.20836	.00010	3.8575	.01495	.00018
Stddev	.00028	.00017	.00003	.00143	.00897	.00066	.0128	.00016	.00014
%RSD	156.19	119.31	2.2717	1.0791	4.3066	677.01	.33133	1.0839	79.473
#1	.00037	.00002	-.00126	.13147	.20202	-.00037	3.8665	.01507	.00008
#2	-.00002	.00026	-.00130	.13349	.21471	.00057	3.8485	.01484	.00028
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40682	.00134	.00395	-.00124	4.2321	-.00264	-.00019	.06403	.13702
Stddev	.00001	.00070	.00330	.00094	.0289	.00203	.00348	.01439	.03079
%RSD	.00290	52.273	83.518	75.655	.68181	76.751	1876.0	22.468	22.468
#1	.40681	.00184	.00162	-.00190	4.2525	-.00408	.00227	.07420	.15879
#2	.40683	.00085	.00629	-.00058	4.2117	-.00121	-.00264	.05386	.11525
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00279	.00973	-.00024	.00019	.00032	.01378	.00000	.00567	.00131
Stddev	.00111	.00017	.00174	.00005	.00134	.00534	.00005	.00054	.00006
%RSD	39.858	1.7615	715.27	26.231	413.40	38.750	1345.2	9.4410	4.7482
#1	.00201	.00961	-.00147	.00015	-.00062	.01000	-.00003	.00605	.00136
#2	.00358	.00985	.00099	.00022	.00127	.01755	.00004	.00529	.00127
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3031.5	53883.	6548.6						
Stddev	20.1	174.	12.2						
%RSD	.66172	.32343	.18612						
#1	3045.7	54006.	6557.2						
#2	3017.3	53759.	6540.0						

Sample Name: 69708-E-1-B MS @50 Acquired: 5/31/2015 1:37:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	.05098	.02471	.30961	.04129	.00095	.04220	.15.738	.00216
Stddev	.00008	.00013	.00187	.0219	.00024	.00005	.00158	.115	.00023
%RSD	9.6689	.24758	7.5863	.70822	.57364	4.9575	3.7348	.73134	10.764
#1	.00092	.05107	.02339	3.0806	.04112	.00099	.04331	15.657	.00199
#2	.00080	.05089	.02604	3.1116	.04146	.00092	.04108	15.819	.00232
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01136	.00451	.00441	.01831	1.5096	.02334	20.900	.08568	.02162
Stddev	.00034	.00022	.00008	.00077	.0389	.00019	.180	.00061	.00028
%RSD	2.9800	4.8561	1.9126	4.2286	2.5803	.81735	.85939	.71763	1.3012
#1	.01112	.00435	.00435	.01886	1.4821	.02320	20.773	.08524	.02182
#2	.01160	.00466	.00447	.01777	1.5372	.02347	21.027	.08611	.02142
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9358	.01776	.22501	.01250	22.336	.01062	.06969	.65806	1.4082
Stddev	.0130	.00062	.00592	.00075	.160	.00218	.00082	.00958	.0205
%RSD	.67303	3.4645	2.6302	6.0089	.71827	20.488	1.1756	1.4553	1.4553
#1	1.9265	.01820	.22083	.01197	22.222	.00908	.07027	.65129	1.3938
#2	1.9450	.01733	.22920	.01303	22.449	.01216	.06911	.66483	1.4227
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04849	.06995	.02320	.02120	.04190	.02103	.01032	.01330	.00958
Stddev	.00044	.00023	.00178	.00012	.00350	.00143	.00069	.00032	.00027
%RSD	.91161	.32225	7.6762	.54767	8.3598	6.7912	6.7256	2.4240	2.8132
#1	.04817	.06979	.02194	.02111	.04437	.02204	.00983	.01307	.00939
#2	.04880	.07011	.02446	.02128	.03942	.02002	.01081	.01352	.00977
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2996.5	53039.	6355.8						
Stddev	5.0	141.	1.8						
%RSD	.16733	.26518	.02863						
#1	2993.0	53138.	6357.1						
#2	3000.0	52939.	6354.5						

Sample Name: 69708-E-1-C MSD @50 Acquired: 5/31/2015 1:40:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.05256	.02490	.3.1662	.04243	.00091	.04637	.15.765	.00213
Stddev	.00001	.00010	.00693	.0210	.00016	.00005	.00042	.011	.00017
%RSD	1.4679	.18736	27.842	.66367	.38231	5.8562	.90925	.07048	7.9716
#1	.00067	.05263	.02000	3.1513	.04231	.00094	.04607	15.757	.00201
#2	.00066	.05249	.02981	3.1810	.04254	.00087	.04667	15.773	.00225
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01150	.00416	.00459	.01751	.1.5452	.02511	.21.189	.08704	.02250
Stddev	.00005	.00045	.00014	.00113	.0102	.00099	.026	.00083	.00027
%RSD	.46507	10.866	3.1402	6.4726	.65751	3.9236	.12322	.95088	1.1994
#1	.01154	.00384	.00469	.01831	1.5380	.02442	21.208	.08762	.02231
#2	.01146	.00448	.00449	.01671	1.5524	.02581	21.171	.08645	.02269
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9602	.01816	.23088	.01224	.22.819	.00919	.07156	.67992	1.4550
Stddev	.0135	.00013	.00445	.00144	.150	.00124	.00157	.00427	.0091
%RSD	.69040	.69239	1.9290	11.762	.65566	13.499	2.1919	.62817	.62817
#1	1.9697	.01807	.22773	.01122	22.714	.00832	.07267	.67690	1.4486
#2	1.9506	.01825	.23403	.01326	22.925	.01007	.07045	.68294	1.4615
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05058	.07090	.02316	.02181	.04319	.02281	.01129	.01358	.01132
Stddev	.00133	.00006	.00011	.00020	.00010	.03610	.00028	.00041	.00088
%RSD	2.6201	.08112	.49293	.92547	.23635	158.25	2.4984	3.0274	7.8110
#1	.05152	.07086	.02324	.02195	.04311	.04834	.01149	.01387	.01195
#2	.04964	.07094	.02308	.02167	.04326	-.00271	.01109	.01329	.01070
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2992.6	53446.	6482.3						
Stddev	13.9	369.	37.8						
%RSD	.46448	.69042	.58299						
#1	3002.4	53186.	6455.6						
#2	2982.8	53707.	6509.0						

Sample Name: 69708-E-1-A PDS@50 Acquired: 5/31/2015 1:42:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04723	1.0428	.20951	3.0305	.09595	.04525	.00086	30.786	.05330
#2	.04714	1.0269	.20197	2.9921	.09706	.04555	.00171	30.755	.05255
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.05069	.04956	.04902	.96128	19.644	.10184	37.109	.12103	.05015
#2	.04954	.04868	.04931	.97108	19.618	.10277	37.094	.12085	.04948
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	22.706	.05579	2.1913	.10119	21.511	.10469	.23326	4.7715	10.211
#2	22.429	.05482	2.1643	.10021	21.234	.10343	.23123	4.8680	10.417
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.10780	.09328	.20610	.05063	.20207	.50756	.05258	.20881	.03923
#2	.10789	.09582	.20412	.05048	.20305	.51527	.05191	.20927	.04088
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2932.2	51968.	6375.5						
#2	2952.7	51847.	6517.2						

Sample Name: 280-69708-E-2-A @50 Acquired: 5/31/2015 1:45:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00374	-.00402	.02855	.00220	.00010	-.00068	.56656	-.00007
Stddev	.00051	.00046	.00212	.00001	.00006	.00001	.00069	.00342	.00024
%RSD	329.79	12.254	52.663	.01936	2.7368	9.7972	101.93	.60346	362.05
#1	.00051	.00342	-.00253	.02855	.00225	.00011	-.00117	.56414	-.00023
#2	-.00020	.00407	-.00552	.02854	.00216	.00010	-.00019	.56897	.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.00014	-.00141	-.00091	.23606	-.00129	.10528	.00001	.00019
Stddev	.00014	.00024	.00012	.00036	.01162	.00051	.00192	.00005	.00015
%RSD	41.734	175.99	8.4655	40.003	4.9216	39.424	1.8278	399.48	78.494
#1	.00024	.00031	-.00150	-.00117	.22784	-.00093	.10392	.00005	.00008
#2	.00044	-.00003	-.00133	-.00065	.24427	-.00165	.10664	-.00002	.00029
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.39264	-.00006	.00234	-.00067	.32915	-.00187	-.00279	.03760	.08046
Stddev	.00369	.00029	.00202	.00012	.00428	.00045	.00171	.00292	.00626
%RSD	.93857	496.06	86.378	17.634	1.2989	24.004	61.018	7.7740	7.7740
#1	.39004	-.00027	.00091	-.00058	.33217	-.00219	-.00159	.03553	.07604
#2	.39525	.00015	.00377	-.00075	.32612	-.00155	-.00400	.03967	.08488
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00765	.00547	.00257	.00005	.00163	-.02261	.00045	.00072	.00098
Stddev	.00023	.00020	.00187	.00014	.00083	.02176	.00062	.00023	.00036
%RSD	2.9798	3.6971	72.581	283.99	51.003	96.227	138.02	31.656	36.845
#1	.00781	.00533	.00390	-.00005	.00104	-.03800	.00001	.00088	.00073
#2	.00749	.00562	.00125	.00015	.00221	-.00723	.00089	.00056	.00124
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3004.1	53390.	6309.2						
Stddev	25.7	213.	10.4						
%RSD	.85453	.39896	.16537						
#1	3022.3	53240.	6301.8						
#2	2986.0	53541.	6316.6						

Sample Name: 280-69708-E-3-A @50 Acquired: 5/31/2015 1:47:33 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	.00007	.00393	.01928	.00139	.00015	-.00071	.37829	-.00031
Stddev	.00018	.00008	.00221	.00122	.00036	.00001	.00272	.04362	.00005
%RSD	76.329	117.80	56.252	6.3431	25.568	8.4745	384.72	11.531	16.773
#1	-.00036	.00012	.00549	.02015	.00114	.00014	-.00263	.34745	-.00035
#2	-.00011	.00001	.00236	.01842	.00164	.00016	.00122	.40914	-.00027
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.00023	-.00126	.00383	.11372	-.00032	.21768	.00015	.00003
Stddev	.00005	.00003	.00001	.00033	.04337	.00142	.00197	.00002	.00023
%RSD	13.462	14.898	.57023	8.6149	38.133	441.65	.90405	10.915	660.56
#1	.00033	.00021	-.00125	.00360	.08306	-.00132	.21629	.00016	-.00013
#2	.00040	.00025	-.00126	.00407	.14438	.00068	.21907	.00014	.00019
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.35611	.00006	.00084	-.00063	.42238	-.00317	.00005	-.00559	-.01196
Stddev	.02905	.00039	.00152	.00111	.00243	.00003	.00333	.00951	.02035
%RSD	8.1569	618.70	180.58	176.36	.57610	1.0917	6259.9	170.13	170.13
#1	.33557	-.00021	.00192	-.00142	.42066	-.00315	-.00230	.00113	.00243
#2	.37665	.00034	-.00023	.00016	.42410	-.00319	.00241	-.01231	-.02635
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00847	.00189	.00197	-.00006	-.00066	-.01266	.00038	.00054	.00102
Stddev	.00132	.00037	.00148	.00025	.00087	.03625	.00011	.00031	.00040
%RSD	15.589	19.526	75.044	439.35	132.30	286.23	28.511	57.249	39.472
#1	.00754	.00163	.00092	.00012	-.00127	.01297	.00030	.00075	.00130
#2	.00941	.00215	.00301	-.00024	-.00004	-.03829	.00046	.00032	.00073
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2978.4	53021.	6308.8						
Stddev	12.7	63.	86.7						
%RSD	.42722	.11836	1.3745						
#1	2969.4	53065.	6247.5						
#2	2987.4	52977.	6370.1						

Sample Name: 280-69708-E-4-A @50 Acquired: 5/31/2015 1:49:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00028	As1890 ppm .00140	B_2089 ppm .00045	Ba4554 ppm .00104	Be3130 ppm .00007	Bi2230 ppm .00032	Ca3179 ppm 16.718	Cd2288 ppm -.00008
#1	.00009	.00086	-.00101	2.8736	.00088	.00004	.00114	16.719	-.00003
#2	-.00065	.00195	.00190	2.8499	.00120	.00009	-.00051	16.717	-.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00061	Cu3247 ppm .00000	Fe2599 ppm -.00064	K_7664 ppm .00074	Li6707 ppm .46011	Mg2790 ppm .00196	Mn2576 ppm 15.728	Mo2020 ppm .06071
#1	.00066	.00009	-.00060	.00067	.47534	.00223	15.776	.06068	.00091
#2	.00056	-.00009	-.00068	.00081	.44488	.00170	15.680	.06073	.00071
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .65177	P_1782 ppm .00352	Pb2203 ppm .00431	S_1820 ppm .00044	Sb2068 ppm 18.165	Se1960 ppm -.00013	Si2881 ppm .00652	SiO2 ppm .38435
#1	.65408	.00319	.00727	.00142	18.071	.00018	.00421	.38236	.81825
#2	.64946	.00385	.00135	-.00054	18.260	-.00044	.00882	.38634	.82676
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00693	Th2837 ppm .05916	Ti3349 ppm .00040	Tl1908 ppm .00034	U_3701 ppm -.00184	V_2924 ppm -.00925	Zn2062 ppm -.00025	Zr3391 ppm .00203
#1	.00726	.05918	.00059	.00058	-.00267	-.02706	-.00028	.00232	.00134
#2	.00659	.05915	.00020	.00011	-.00100	.00856	-.00021	.00173	-.00038
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2972.8	Y_3774 Cts/S 52363.	377.433 {89}					
#1	2975.9	52208.	6250.0						
#2	2969.8	52518.	6248.4						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 1:52:33 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	-00754	49.324	.00015	.01827	.00085	.00005	W 1.0797	.02905	-.00016	-.00040	.00069
Stddev	.00004	.140	.00123	.00006	.00013	.00006	.0158	.00053	.00001	.00009	.00032
%RSD	.58434	.28322	798.43	.33074	15.640	140.11	1.4630	1.8102	9.2703	22.878	46.445
#1	-.00751	49.225	-.00072	.01823	.00094	.00009	1.0685	.02868	-.00015	-.00034	.00046
#2	-.00757	49.423	.00102	.01831	.00075	.00000	1.0908	.02942	-.00017	-.00047	.00091
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 5.0000%	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00275	46.659	.08814	.00087	.05540	.00175	-.00019	257.52	.00229	.00869	.00014
Stddev	.00006	.776	.03129	.00129	.00142	.00009	.00032	.45	.00020	.00275	.00093
%RSD	2.2168	1.6624	35.495	147.78	2.5588	5.3901	166.63	.17526	8.6902	31.628	665.06
#1	-.00271	46.111	.06602	-.00004	.05440	-.00168	.00003	257.20	.00215	.00675	.00080
#2	-.00280	47.208	.11026	.00178	.05640	-.00182	-.00042	257.84	.00243	.01063	-.00052
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	5.2412	-.01288	.00644	-.03431	-.07341	-.00046	.00032	W 5.2839	-.01231	.00039	W 10.957
Stddev	.0712	.00062	.00033	.00582	.01245	.00079	.00002	.0807	.00112	.00094	.036
%RSD	1.3585	4.8159	5.1261	16.962	16.962	171.57	5.3606	1.5266	9.1067	241.15	.32578
#1	5.1909	-.01244	.00621	-.03842	-.08222	-.00102	.00031	5.2269	-.01152	-.00028	10.982
#2	5.2916	-.01331	.00668	-.03019	-.06461	-.00010	.00034	5.3410	-.01310	.00106	10.932
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Warn 5.0000 5.0000%	None	None	Chk Warn 10.000 5.0000%	
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00327	-.00049	-.15287								
Stddev	.00051	.00080	.00130								
%RSD	15.712	162.74	.85079								
#1	.00290	-.00106	-.15195								
#2	.00363	.00007	-.15379								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2995.6	51392.	6439.0								
Stddev	19.2	581.	5.0								
%RSD	.64187	1.1296	.07707								
#1	3009.2	51803.	6442.5								
#2	2982.0	50982.	6435.5								

Sample Name: CCV-3296664 Acquired: 5/31/2015 1:55:12 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.48899	.54289	1.0477	F .56274	.50040	.47398	.00117	4.6974	.53998	.51773	.53075	.50513
Stddev	.00370	.00480	.0085	.00544	.00731	.00494	.00098	.0401	.00531	.00343	.00170	.00411
%RSD	.75622	.88363	.81407	.96687	1.4606	1.0419	84.060	.85344	.98361	.66287	.31998	.81323
#1	.48637	.54628	1.0538	.56659	.49523	.47049	.00187	4.6690	.54374	.52015	.53195	.50222
#2	.49160	.53950	1.0417	.55890	.50557	.47747	.00047	4.7257	.53623	.51530	.52955	.50803
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3037	50.617	1.0291	19.157	.51602	.51161	5.3440	.51137	1.0976	1.0100	.01752	1.0742
Stddev	.0227	.379	.0099	.059	.00206	.00332	.0623	.00225	.0160	.0057	.00135	.0064
%RSD	.98425	.74970	.95787	.30677	.39948	.64965	1.1649	.44049	1.4549	.56048	7.7161	.59879
#1	2.2876	50.348	1.0221	19.115	.51456	.51396	5.3000	.51296	1.1088	1.0140	.01848	1.0788
#2	2.3197	50.885	1.0360	19.198	.51748	.50925	5.3881	.50977	1.0863	1.0060	.01657	1.0697
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0421	4.5864	9.8149	1.0216	.50045	.00191	.51779	1.0391	-.01815	.53291	.49134	.47563
Stddev	.0130	.1071	.2292	.0076	.00612	.00014	.00672	.0072	.00133	.00423	.00076	.00626
%RSD	1.2443	2.3351	2.3351	.73909	1.2234	7.1756	1.2980	.68770	7.3157	.79372	.15453	1.3154
#1	1.0513	4.5107	9.6529	1.0269	.49612	.00200	.51304	1.0442	-.01909	.52992	.49188	.47121
#2	1.0330	4.6621	9.9770	1.0162	.50478	.00181	.52254	1.0340	-.01721	.53590	.49081	.48006
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3070.0	54444.	6529.1									
Stddev	11.5	208.	32.0									
%RSD	.37603	.38131	.49003									
#1	3061.8	54590.	6506.5									
#2	3078.1	54297.	6551.7									

Sample Name: CCB Acquired: 5/31/2015 1:57:41 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00005	-.00050	-.00031	.01272	-.00007	.00011	.00228	-.00556	-.00014	.00005	.00008	-.00150	-.00180
Stddev	.00065	.00057	.00190	.00043	.00007	.00001	.00374	.00113	.00014	.00003	.00012	.00013	.00086
#1	.00051	-.00090	.00103	.01302	-.00002	.00012	.00493	-.00636	-.00023	.00007	.00016	-.00140	-.00119
#2	-.00040	-.00009	-.00165	.01242	-.00011	.00010	-.00036	-.00476	-.00004	.00003	-.00001	-.00159	-.00241

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.03973	-.00074	-.00385	-.00007	-.00007	.14030	.00004	.00187	-.00058	.01849	.00013	-.00017	-.04181
Stddev	.04321	.00046	.00066	.00003	.00000	.00896	.00002	.00204	.00065	.00126	.00169	.00027	.00228
#1	.07028	-.00042	-.00338	-.00005	-.00007	.13396	.00006	.00331	-.00011	.01759	.00133	.00002	-.04342
#2	.00918	-.00107	-.00432	-.00009	-.00007	.14664	.00003	.00043	-.00104	.01938	-.00107	-.00036	-.04020

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.08947	.00028	.00008	.00370	.00020	-.00044	-.01919	.00048	-.00010	.00264			
Stddev	.00487	.00011	.00008	.00127	.00036	.00040	.00327	.00009	.00070	.00159			
#1	-.09292	.00035	.00013	.00280	-.00006	-.00072	-.01688	.00055	.00039	.00377			
#2	-.08603	.00020	.00002	.00460	.00045	-.00016	-.02151	.00042	-.00060	.00152			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3136.2	55558.	6896.2										
Stddev	18.0	138.	36.5										
#1	3123.5	55655.	6922.0										
#2	3148.9	55460.	6870.4										

Sample Name: CCVL3301032 Acquired: 5/31/2015 2:00:04 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00968	.10990	.01094	.11906	.00979	.00088	.10694	.17911	.00519	.01069	.01072	.01368
Stddev	.00045	.00075	.00225	.00006	.00000	.00004	.00045	.00415	.00005	.00022	.00013	.00023
%RSD	4.6255	.68566	20.556	.04732	.04395	4.7688	.42115	2.3187	.91352	2.0592	1.2361	1.6754

#1	.00936	.11043	.01253	.11902	.00979	.00091	.10725	.17617	.00516	.01084	.01063	.01384
#2	.00999	.10937	.00935	.11910	.00978	.00085	.10662	.18204	.00522	.01053	.01082	.01352

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08657	3.0101	.01022	.20064	.01042	.01986	1.1661	.04066	3.0759	.00764	.02100	.00931
Stddev	.00017	.0510	.00001	.00588	.00001	.00021	.0061	.00054	.0022	.00023	.00045	.00116
%RSD	.19755	1.6959	.11510	2.9284	.10755	1.0444	.52077	1.3338	.07320	2.9848	2.1391	12.408

#1	.08669	2.9740	.01021	.20479	.01041	.01971	1.1704	.04105	3.0775	.00748	.02069	.01013
#2	.08645	3.0462	.01023	.19648	.01043	.02000	1.1618	.04028	3.0743	.00780	.02132	.00850

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01644	.39493	.84515	.10159	.00983	.01842	.01012	.01624	F .01338	.01114	.02119	.01399
Stddev	.00697	.00300	.00643	.00081	.00009	.00138	.00003	.00070	.00875	.00025	.00026	.00119

#1	.01151	.39281	.84060	.10102	.00977	.01940	.01010	.01673	.01957	.01132	.02100	.01314
#2	.02137	.39705	.84969	.10217	.00990	.01745	.01014	.01574	.00719	.01096	.02137	.01483

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3139.1	55751.	6727.9
Stddev	.5	69.	21.5
%RSD	.01575	.12325	.31912

#1	3139.5	55703.	6743.1
#2	3138.8	55800.	6712.7

Sample Name: 280-69708-E-5-A @50 Acquired: 5/31/2015 2:02:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00034	As1890 ppm .00281	B_2089 ppm .00071	Ba4554 ppm .03084	Be3130 ppm .00193	Bi2230 ppm .00004	Ca3179 ppm .00065	Cd2288 ppm .0779
#1	-.00008	.00268	-.00281	.02948	.00198	.00004	-.00079	1.0803	-.00019
#2	-.00059	.00293	.00424	.03220	.00189	.00004	-.00051	1.0755	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00018	Cu3247 ppm .00011	Fe2599 ppm .00126	K_7664 ppm .00362	Li6707 ppm .07787	Mg2790 ppm .00157	Mn2576 ppm .24653	Mo2020 ppm .00070
#1	-.00001	-.00005	-.00118	.00373	.05377	.00011	.24474	.00070	.00144
#2	.00038	.00027	-.00134	.00350	.10198	.00302	.24833	.00070	.00173
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .27700	P_1782 ppm .00040	Pb2203 ppm .00298	S_1820 ppm .00000	Sb2068 ppm .10881	Se1960 ppm .00375	Si2881 ppm .00164	SiO2 ppm .01241
#1	.28030	.00045	.00498	.00120	1.0892	-.00607	.00150	-.00809	-.01731
#2	.27371	.00036	.00097	-.00120	1.0870	-.00143	.00178	-.01672	-.03579
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00764	Th2837 ppm .00350	Ti3349 ppm .00313	Tl1908 ppm .00014	U_3701 ppm .00128	V_2924 ppm .02990	Zn2062 ppm .00104	Zr3391 ppm .00064
#1	.00722	.00354	.00352	.00027	.00095	-.04410	.00130	.00074	.00083
#2	.00807	.00347	.00274	.00001	.00160	-.01571	.00078	.00053	.00265
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3153.6	Y_3774 Cts/S 55873.	377.433 {89}					
#1	3150.8	55817.	6717.4						
#2	3156.5	55930.	6742.6						

Sample Name: 280-69708-E-6-A @50 Acquired: 5/31/2015 2:05:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00015	As1890 ppm .42574	B_2089 ppm .00089	Ba4554 ppm .01600	Be3130 ppm .00049	Bi2230 ppm .00019	Ca3179 ppm 4.7757	Cd2288 ppm -.00010
#1	.00007	.42414	-.00223	.01624	.00081	.00015	-.00157	4.7606	-.00017
#2	-.00037	.42735	.00044	.01576	.00018	.00022	.00101	4.7908	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00525	Cu3247 ppm .00035	Fe2599 ppm .00169	K_7664 ppm .10839	Li6707 ppm .07443	Mg2790 ppm .00334	Mn2576 ppm 1.8298	Mo2020 ppm -.08873
#1	.00528	.00035	.00192	.10961	.08723	.00377	1.8219	.08844	-.00058
#2	.00522	.00035	.00145	.10717	.06163	.00291	1.8377	.08902	-.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .41592	P_1782 ppm .01018	Pb2203 ppm .00309	S_1820 ppm -.00006	Sb2068 ppm 8.0132	Se1960 ppm -.00192	Si2881 ppm .01989	SiO2 ppm .04256
#1	.41243	.01027	.00218	-.00015	7.9755	-.00145	-.00219	.02459	.05262
#2	.41940	.01009	.00399	.00002	8.0508	-.00238	-.00177	.01518	.03249
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00683	Th2837 ppm .00826	Ti3349 ppm .00209	Tl1908 ppm .00013	U_3701 ppm -.00111	V_2924 ppm -.02017	Zn2062 ppm .00060	Zr3391 ppm .01633
#1	.00726	.00835	.00186	-.00025	-.00016	-.01305	.00115	.01553	.00222
#2	.00641	.00818	.00232	.00051	-.00206	-.02728	.00005	.01714	.00135
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3156.7	Y_3774 Cts/S 56049.	377.433 {89}					
#1	3166.5	56133.	6805.2						
#2	3146.8	55965.	6782.8						

Sample Name: 280-69708-E-7-A @50 Acquired: 5/31/2015 2:08:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00005	As1890 ppm .00065	B_2089 ppm .00162	Ba4554 ppm .00909	Be3130 ppm .00003	Bi2230 ppm .00000	Ca3179 ppm .00112	Cd2288 ppm .00122
#1	-.00002	.00053	.00161	.00937	.00004	.00005	-.00022	.00229	-.00034
#2	-.00008	.00077	.00163	.00882	.00002	-.00004	-.00202	.00015	-.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00002	Cu3247 ppm -.00023	Fe2599 ppm -.00149	K_7664 ppm .00742	Li6707 ppm .05607	Mg2790 ppm -.00117	Mn2576 ppm .00376	Mo2020 ppm -.00001
#1	-.00015	-.00032	-.00132	.00784	.05454	-.00101	.00696	.00003	.00035
#2	.00012	-.00014	-.00167	.00700	.05760	-.00133	.00056	-.00006	.00013
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .14625	P_1782 ppm -.00008	Pb2203 ppm .00123	S_1820 ppm -.00061	Sb2068 ppm .02011	Se1960 ppm -.00339	Si2881 ppm -.00409	SiO2 ppm -.03303
#1	.14302	-.00023	.00147	-.00061	.01797	-.00375	-.00284	-.03664	-.07842
#2	.14948	.00008	.00099	-.00060	.02225	-.00302	-.00534	-.02942	-.06297
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00688	Th2837 ppm .00003	Ti3349 ppm .00281	Tl1908 ppm -.00039	U_3701 ppm .00021	V_2924 ppm -.04328	Zn2062 ppm .00114	Zr3391 ppm -.00012
#1	.00677	-.00003	.00179	.00043	.00129	-.02822	.00099	-.00029	.00087
#2	.00699	.00008	.00384	.00035	-.00087	-.05833	.00130	.00005	.00284
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3130.4	Y_3774 Cts/S 55811.	377.433 {89}					
#1	3134.1	55731.	6753.5						
#2	3126.7	55890.	6759.8						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 2:10:25 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm k .00741	Al3092 ppm 47.238	As1890 ppm k -.00079	B_2089 ppm k .00914	Ba4554 ppm k .00036	Be3130 ppm k .00005	Bi2230 ppm k .99174	Ca3179 ppm k .00532	Cd2288 ppm k -.00214	Co2286 ppm k .00136	Cr2055 ppm k .00056
#1	k .00746	47.214	k .00127	k .00970	k .00022	k .00006	k .98739	k .00533	k -.00219	k .00123	k .00053
#2	k .00736	47.261	k -.00284	k .00858	k .00051	k .00005	k .99610	k .00530	k -.00210	k .00150	k .00059
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm k .00722	Fe2714 ppm W 44.858	K_7664 ppm .04292	Li6707 ppm -.00034	Mg2790 ppm k .04573	Mn2576 ppm k -.00040	Mo2020 ppm k -.00115	Na8183 ppm 249.19	Ni2316 ppm k .00255	P_1782 ppm k .01849	Pb2203 ppm k .00965
#1	k .00752	44.926	.05369	-.00061	k .04611	k -.00040	k .00128	249.30	k .00235	k .01773	k .01010
#2	k .00691	44.789	.03214	-.00006	k .04535	k -.00039	k .00103	249.09	k .00275	k .01925	k .00920
Check ? Value Range	None	Chk Warn 50.000 -10.000%	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm k 5.0515	Sb2068 ppm k -.03373	Se1960 ppm k -.00548	Si2881 ppm k -.04300	SiO2 ppm k -.09201	Sn1899 ppm k -.00077	Sr4077 ppm .00039	Th2837 ppm kW 5.2705	Ti3349 ppm k .01966	Tl1908 ppm k -.00024	U_3701 ppm k 10.489
#1	k 5.0430	k -.03508	k -.00619	k -.03247	k -.06948	k -.00037	.00046	k 5.2648	k .01993	k .00029	k 10.597
#2	k 5.0600	k -.03237	k -.00478	k -.05353	k -.11455	k -.00117	.00032	k 5.2761	k .01939	k -.00077	k 10.382
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Warn 5.0000 5.0000%	None	None	Chk Pass	
Elem Units Avg Stddev %RSD	V_2924 ppm k -.00224	Zn2062 ppm k -.00001	Zr3391 ppm k .11926								
#1	k -.00236	k -.00048	k .11933								
#2	k -.00213	k .00045	k .11920								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3098.5	Y_3600 Cts/S 54541.	Y_3774 Cts/S 6783.0								
#1	3103.0	54577.	6762.8								
#2	3094.1	54505.	6803.2								

Sample Name: CCV-3296664 Acquired: 5/31/2015 2:13:08 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .47970	Al1670 ppm .53503	As1890 ppm 1.0239	B_2089 ppm .54509	Ba4554 ppm .48010	Be3130 ppm .45239	Bi2230 ppm .00030	Ca3179 ppm F 4.4564	Cd2288 ppm .52253	Co2286 ppm .50618	Cr2055 ppm .52823
#1	.48163	.54024	1.0308	.54682	.48062	.45243	.00328	4.4719	.52633	.50806	.52942
#2	.47777	.52982	1.0170	.54335	.47959	.45235	-.00268	4.4408	.51873	.50430	.52704
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail 5.0000 -10.490%	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .49575	Fe2599 ppm F 2.1654	K_7664 ppm 48.571	Li6707 ppm .98206	Mg2790 ppm 18.910	Mn2576 ppm .50818	Mo2020 ppm .49970	Na5895 ppm 5.1446	Ni2316 ppm .49968	P_1782 ppm 1.0730	Pb2203 ppm .98675
#1	.49832	2.1748	48.638	.98288	18.954	.50707	.50257	5.1697	.50138	1.0834	.99014
#2	.49319	2.1560	48.503	.98124	18.867	.50930	.49683	5.1195	.49798	1.0626	.98335
Check ? Value Range	Chk Pass	Chk Fail 2.5000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .01648	Sb2068 ppm 1.0477	Se1960 ppm 1.0224	Si2881 ppm F 4.3191	SiO2 ppm F 9.2429	Sn1899 ppm 1.0011	Sr4077 ppm .47840	Th2837 ppm .00146	Ti3349 ppm .50608	TI1908 ppm 1.0157	U_3701 ppm -.02467
#1	.01744	1.0554	1.0280	4.3410	9.2897	1.0046	.47858	.00156	.50638	1.0211	-.03397
#2	.01551	1.0400	1.0168	4.2973	9.1961	.99752	.47823	.00135	.50578	1.0103	-.01536
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Fail 5.0000 -10.490%	Chk Fail 10.700 -10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .51913	Zn2062 ppm .48067	Zr3391 ppm W .44773								
#1	.52215	.48205	.44829								
#2	.51611	.47928	.44717								
Check ? Value Range	Chk Pass	Chk Pass	Chk Warn .50000 -10.000%								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3129.2	Y_3600 Cts/S 55232.	Y_3774 Cts/S 6781.0								
#1	3121.0	55451.	6783.0								
#2	3137.5	55012.	6779.1								

Sample Name: CCB Acquired: 5/31/2015 2:15:36 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00030	.00044	-.00101	.00832	F .01925	.00010	.00230	.00875	-.00009	.00028	.00002	-.00136
Stddev	.00019	.00021	.00295	.00032	.00023	.00003	.00059	.00252	.00001	.00064	.00000	.00024
%RSD	64.504	46.891	291.64	3.8092	1.1768	31.384	25.734	28.743	8.5098	226.07	14.930	17.663

#1	.00043	.00059	.00108	.00854	.01941	.00012	.00188	.00697	-.00009	-.00017	.00002	-.00119
#2	.00016	.00029	-.00310	.00809	.01909	.00008	.00272	.01053	-.00008	.00074	.00003	-.00153

Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000 -.01000	Chk Pass						
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.00414	.02520	-.00020	.00037	.00003	.00035	.13688	.00005	.00244	-.00070	.01733	-.00195
Stddev	.00264	.01833	.00005	.00029	.00010	.00011	.02344	.00029	.00144	.00054	.00238	.00133
%RSD	63.725	72.735	24.329	77.035	348.52	30.326	17.127	533.35	58.929	77.388	13.736	68.083
#1	.00601	.03816	-.00017	.00017	-.00004	.00027	.15346	.00026	.00142	-.00108	.01565	-.00101
#2	.00227	.01224	-.00024	.00058	.00010	.00042	.12030	-.00015	.00345	-.00032	.01902	-.00289

Check ? High Limit Low Limit	Chk Pass											
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.00130	-.02907	-.06222	.00106	.00053	.00174	.00044	-.00178	-.01388	-.00004	.00005	.00108
Stddev	.00550	.00710	.01520	.00056	.00014	.00044	.00016	.00066	.03129	.00060	.00047	.00091
%RSD	421.71	24.435	24.435	53.177	26.029	25.626	35.189	37.140	225.49	1608.8	883.23	84.336
#1	-.00519	-.03410	-.07297	.00146	.00063	.00142	.00033	-.00225	.00825	.00039	-.00028	.00172
#2	.00258	-.02405	-.05147	.00066	.00043	.00205	.00055	-.00131	-.03600	-.00046	.00039	.00044

Check ? High Limit Low Limit	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3187.5	56619.	6898.5									
Stddev	1.1	320.	18.3									
%RSD	.03428	.56438	.26552									
#1	3186.7	56845.	6885.5									
#2	3188.3	56393.	6911.4									

Sample Name: CCVL3301032II Acquired: 5/31/2015 2:17:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00914	.10619	.01408	.11184	.00969	.00099	.10607	.18170	.00512	.01035	.01055	.01354	.08450	2.9035
Stddev	.00032	.00124	.00069	.00070	.00007	.00005	.00091	.00234	.00008	.00033	.00026	.00040	.00238	.0066
%RSD	3.5459	1.1648	4.9104	.62564	.76781	4.7972	.85954	1.2858	1.6036	3.2099	2.4427	2.9258	2.8140	.22656
#1														
#2														

Check ? Value Range	Chk Pass													

Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.00883	.19318	.01031	.01952	1.1163	.04007	3.0333	.00844	.01328	.00851	.01417	.39983	.85563	.10015
Stddev	.00103	.00218	.00014	.00028	.0175	.00048	.0048	.00132	.00079	.00085	.00439	.00667	.01428	.00146
%RSD	11.725	1.1287	1.3536	1.4380	1.5674	1.2062	1.5843	15.627	5.9494	10.005	31.018	1.6688	1.6688	1.4606
#1														
#2														

Check ? Value Range	Chk Pass	None	Chk Pass											

Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00962	.01873	.01030	.01427	.04857	.01129	.01994	.01471
Stddev	.00010	.00210	.00039	.00230	.01186	.00063	.00111	.00076
%RSD	1.0491	11.238	3.7512	16.115	24.418	5.6033	5.5909	5.1399
#1								
#2								

Check ? Value Range	Chk Pass							

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3191.3	56454.	6847.4
Stddev	.3	135.	12.5
%RSD	.00830	.23870	.18191
#1	3191.5	56549.	6856.2
#2	3191.1	56359.	6838.6

Sample Name: 280-69708-E-1-A @2 Acquired: 5/31/2015 2:20:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00039	As1890 ppm .14629	B_2089 ppm .00966	W 68.712 W	Ba4554 ppm .02443	Be3130 ppm .00046	Bi2230 ppm .00135	Ca3179 ppm 315.80	Cd2288 ppm .00051
#1	.00012	.14610	.00857	68.617	.02447	.00044	.00304	317.88	.00039	
#2	.00067	.14649	.01074	68.807	.02438	.00048	-.00035	313.71	.00062	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .02117	Cu3247 ppm .00074	Fe2599 ppm .00046	K_7664 ppm .27264	Li6707 ppm 10.584	Mg2790 ppm .07354	Mn2576 ppm 449.30	Mo2020 ppm 1.5736	
#1	.02126	.00064	.00055	.27190	10.591	.07408	452.90	1.5723	.02224	
#2	.02107	.00083	.00037	.27337	10.578	.07299	445.70	1.5749	.02140	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 16.701	P_1782 ppm .12603	Pb2203 ppm .01947	S_1820 ppm .00486	Sb2068 ppm F 510.93	Se1960 ppm .00792	Si2881 ppm .67928	SiO2 ppm 11.408	
#1	16.623	.12645	.01906	.00579	510.15	.00649	.67770	11.406	24.408	
#2	16.778	.12562	.01988	.00394	511.71	.00935	.68086	11.410	24.418	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00309	Th2837 ppm 1.0942	Ti3349 ppm .00576	Tl1908 ppm -.00046	U_3701 ppm -.00489	V_2924 ppm F -11992	Zn2062 ppm .00429	Zr3391 ppm .06879	
#1	.00333	1.0921	.00485	-.00072	-.00427	-.14093	.00426	.06921	.00095	
#2	.00285	1.0963	.00667	-.00020	-.00550	-.09892	.00433	.06837	.00262	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2886.8	Y_3774 Cts/S 52197.	377.433 {89}	6776.3	292.402 {115}	206.200 {163}	339.198 {99}	Zr3391 ppm .00178	
#1	2880.7	52191.	6744.2							
#2	2893.0	52203.	6808.4							

Sample Name: 69708-E-1-A SD@10 Acquired: 5/31/2015 2:23:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.03188	.00274	W 14.219	.00487	.00013	.00037	65.972	.00046
Stddev	.00011	.00044	.00122	.070	.00030	.00003	.00013	.521	.00017
%RSD	34.117	1.3876	44.541	.49520	6.2379	21.015	34.700	.78977	36.161
#1	-.00040	.03219	.00188	14.170	.00466	.00015	.00046	65.603	.00058
#2	-.00024	.03157	.00360	14.269	.00509	.00011	.00028	66.340	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00474	.00048	-.00064	.00036	2.0831	.01336	92.255	.32571	.00274
Stddev	.00013	.00029	.00011	.00012	.0075	.00075	.352	.00031	.00029
%RSD	2.6591	61.038	17.450	33.071	.35781	5.6452	.38119	.09621	10.608
#1	.00483	.00027	-.00056	.00045	2.0884	.01283	92.504	.32548	.00294
#2	.00465	.00068	-.00072	.00028	2.0779	.01389	92.006	.32593	.00253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.1268	.02867	.00679	.00409	102.26	.00200	.13350	2.2387	4.7909
Stddev	.0644	.00071	.00351	.00241	.51	.00364	.00214	.0549	.1175
%RSD	2.0602	2.4919	51.753	58.986	.50105	182.15	1.6055	2.4529	2.4529
#1	3.0813	.02918	.00928	.00580	101.89	-.00058	.13501	2.1999	4.7078
#2	3.1724	.02817	.00431	.00239	102.62	.00458	.13198	2.2776	4.8740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00434	.21887	.00436	.00000	-.00589	-.03659	-.00057	.01412	.00173
Stddev	.00122	.00179	.00085	.0002	.00319	.00809	.00016	.00027	.00155
%RSD	28.112	.81703	19.427	12842.	.54082	22.116	28.590	1.8976	89.577
#1	.00521	.21760	.00496	-.00015	-.00814	-.04231	-.00069	.01431	.00282
#2	.00348	.22013	.00377	.00014	-.00364	-.03087	-.00046	.01393	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3074.9	55103.	6796.2						
Stddev	8.3	53.	1.0						
%RSD	.27090	.09591	.01466						
#1	3080.8	55141.	6796.9						
#2	3069.0	55066.	6795.5						

Sample Name: 69708-E-1-B MS @2 Acquired: 5/31/2015 2:26:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02164	1.0787	W 2.4659	.52030	W 73.089	.96860	.02176	F 1.0222	363.37
Stddev	.00007	.0026	.0022	.00372	.321	.00119	.00005	.0078	.13
%RSD	.34188	.23672	.08826	.71482	.43892	.12244	.23502	.76033	.03477
#1	.02159	1.0805	2.4644	.51767	72.862	.96944	.02180	1.0167	363.28
#2	.02169	1.0769	2.4674	.52293	73.315	.96776	.02173	1.0277	363.46
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05262	.25027	.08991	.12487	.41801	36.259	.59112	W 501.36	1.9027
Stddev	.00023	.00027	.00033	.00075	.00159	.036	.00497	4.36	.0003
%RSD	.44543	.10965	.36488	.60241	.38095	.09972	.84135	.86976	.01628
#1	.05245	.25008	.09014	.12434	.41689	36.233	.58761	504.44	1.9029
#2	.05278	.25047	.08967	.12540	.41914	36.284	.59464	498.27	1.9025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52373	44.071	.35704	W 5.6234	.22880	F 542.81	.27886	1.7782	16.543
Stddev	.00204	.614	.00038	.0093	.00031	2.44	.00018	.0093	.135
%RSD	.38943	1.3935	.10517	.16594	.13752	.44992	.06376	.52332	.81318
#1	.52518	43.637	.35730	5.6168	.22858	541.09	.27874	1.7717	16.448
#2	.52229	44.506	.35677	5.6300	.22902	544.54	.27899	1.7848	16.638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.402	.94315	1.6375	.49094	.48556	.88664	.89664	.25494	.28426
Stddev	.288	.00071	.0003	.00465	.00048	.00299	.00610	.00075	.00281
%RSD	.81318	.07549	.01994	.94788	.09838	.33745	.67978	.29407	.98995
#1	35.198	.94265	1.6378	.49423	.48590	.88453	.90095	.25441	.28227
#2	35.605	.94365	1.6373	.48765	.48523	.88876	.89233	.25547	.28625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.20592								
Stddev	.00128								
%RSD	.62042								
#1	.20501								
#2	.20682								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 69708-E-1-B MS @2 Acquired: 5/31/2015 2:26:47 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279424 200.7 FGD

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2772.5	50172.	6408.1
Stddev	4.7	72.	11.0
%RSD	.17049	.14365	.17155
#1	2769.1	50223.	6415.9
#2	2775.8	50121.	6400.3

Sample Name: 69708-E-1-C MSD @2 Acquired: 5/31/2015 2:29:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02256	1.0868	W 2.4459	.52915	W 72.730	.98696	.02207	F 1.0436	355.57
Stddev	.00086	.0021	.0514	.00911	.345	.00270	.00013	.0064	5.66
%RSD	3.7985	.19210	2.1030	1.7215	.47382	.27309	.59312	.61328	1.5924
#1	.02195	1.0883	2.4095	.53559	72.974	.98505	.02198	1.0481	351.57
#2	.02316	1.0853	2.4823	.52271	72.487	.98886	.02216	1.0391	359.58
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05338	.25570	.09341	.12751	.41781	36.621	.60290	490.83	1.8817
Stddev	.00014	.00035	.00033	.00092	.00092	.147	.00912	1.79	.0104
%RSD	.26032	.13803	.35538	.71887	.21977	.40042	1.5122	.36549	.55083
#1	.05348	.25545	.09365	.12686	.41716	36.517	.60935	489.56	1.8744
#2	.05328	.25595	.09318	.12816	.41846	36.725	.59646	492.10	1.8891
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53978	44.733	.36236	W 5.7277	.23466	F 539.87	.28355	1.7972	16.592
Stddev	.00060	.417	.00110	.0332	.00205	2.36	.00676	.0040	.012
%RSD	.11154	.93295	.30433	.57992	.87238	.43774	2.3851	.22329	.07378
#1	.54021	44.438	.36314	5.7511	.23611	541.54	.28834	1.8001	16.584
#2	.53936	45.028	.36158	5.7042	.23322	538.20	.27877	1.7944	16.601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.508	.96246	1.6385	.49849	.49388	.90134	.93456	.25852	.28338
Stddev	.026	.00097	.0041	.00364	.00275	.00088	.06467	.00089	.00326
%RSD	.07378	.10085	.25200	.73069	.55782	.09743	6.9199	.34297	1.1513
#1	35.489	.96178	1.6356	.49592	.49193	.90196	.88883	.25789	.28108
#2	35.526	.96315	1.6415	.50107	.49582	.90072	.98029	.25914	.28569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.21462								
Stddev	.00172								
%RSD	.80372								
#1	.21584								
#2	.21340								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 69708-E-1-C MSD @2 Acquired: 5/31/2015 2:29:47 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 279424 200.7 FGD

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2810.1	51223.	6647.8
Stddev	4.1	168.	29.5
%RSD	.14478	.32856	.44389
#1	2807.2	51342.	6668.7
#2	2813.0	51104.	6627.0

Sample Name: 69708-E-1-A PDS@2 Acquired: 5/31/2015 2:32:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04765	1.0634	.21162	W 68.836	.11877	.04279	.00241	336.19	.05283
Stddev	.00003	.0010	.00039	.003	.00012	.00004	.00328	3.63	.00059
%RSD	.07342	.09163	.18407	.00481	.09758	.08608	136.27	1.0809	1.1184
#1	.04767	1.0641	.21135	68.834	.11885	.04281	.00009	333.62	.05324
#2	.04762	1.0627	.21190	68.838	.11868	.04276	.00472	338.76	.05241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06683	.04504	.05004	.80894	30.275	.17725	469.75	1.6179	.07042
Stddev	.00028	.00000	.00052	.00078	.095	.00015	1.76	.0068	.00001
%RSD	.41372	.00634	1.0439	.09626	.31454	.08484	.37514	.41963	.01276
#1	.06703	.04504	.04967	.80949	30.342	.17715	468.51	1.6131	.07043
#2	.06664	.04504	.05041	.80839	30.207	.17736	471.00	1.6227	.07042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	37.556	.17094	W 2.2034	.08992	F 514.68	.11185	.88842	15.895	34.016
Stddev	.140	.00075	.0108	.00032	.10	.00019	.00664	.043	.092
%RSD	.37218	.43639	.48922	.35163	.01872	.17106	.74696	.27063	.27063
#1	37.457	.17146	2.2111	.08969	514.75	.11172	.89312	15.926	34.081
#2	37.655	.17041	2.1958	.09014	514.61	.11199	.88373	15.865	33.950
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09840	1.1399	.19953	.04759	.17367	.39678	.05451	.24351	.03950
Stddev	.00036	.0015	.00041	.00024	.00255	.04308	.00002	.00154	.00158
%RSD	.36649	.13306	.20612	.49548	1.4690	10.857	.03160	.63316	3.9976
#1	.09814	1.1409	.19982	.04742	.17547	.36632	.05452	.24242	.03838
#2	.09865	1.1388	.19924	.04775	.17186	.42724	.05450	.24460	.04061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2790.7	50472.	6477.0						
Stddev	2.9	148.	16.2						
%RSD	.10246	.29259	.25013						
#1	2792.7	50577.	6488.4						
#2	2788.7	50368.	6465.5						

Sample Name: 280-69708-E-2-A @2 Acquired: 5/31/2015 2:35:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00005	As1890 ppm .07965	B_2089 ppm .00237	Ba4554 ppm .34727	Be3130 ppm .04943	Bi2230 ppm .00011	Ca3179 ppm .00028	Cd2288 ppm 12.337
#1	-.00022	.07907	.00152	.35241	.04926	.00006	.00194	12.337	-.00008
#2	.00012	.08023	.00321	.34213	.04960	.00015	-.00251	12.336	-.00017
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00016	Cu3247 ppm .00069	Fe2599 ppm .00103	K_7664 ppm .00375	Li6707 ppm 3.8022	Mg2790 ppm .00231	Mn2576 ppm 2.3679	Mo2020 ppm .00026
#1	-.00012	.00071	-.00134	.00405	3.8067	.00299	2.3572	.00027	.00651
#2	.00044	.00067	-.00071	.00345	3.7976	.00164	2.3787	.00025	.00661
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 3.8718	P_1782 ppm .00092	Pb2203 ppm .00303	S_1820 ppm .00138	Sb2068 ppm 7.3153	Se1960 ppm -.00189	Si2881 ppm .00082	SiO2 ppm 1.4404
#1	3.8774	.00031	.00164	.00242	7.2760	-.00100	.00174	1.4512	3.1055
#2	3.8662	.00153	.00442	.00035	7.3547	-.00278	-.00009	1.4296	3.0593
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00437	Th2837 ppm .11913	Ti3349 ppm .00289	Tl1908 ppm .00007	U_3701 ppm -.00235	V_2924 ppm -.02520	Zn2062 ppm .00208	Zr3391 ppm .00124
#1	.00478	.11889	.00388	-.00021	-.00336	-.00727	.00196	.00148	.00171
#2	.00397	.11936	.00191	.00035	-.00133	-.04313	.00221	.00100	.00146
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3198.2	Y_3774 Cts/S 57453.	377.433 {89}					
#1	3207.1	57430.	7006.2						
#2	3189.2	57476.	7041.3						

Sample Name: 280-69708-E-3-A @2 Acquired: 5/31/2015 2:38:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 ppm	B_2089 ppm	Ba4554 .02074	Be3130 ppm	Bi2230 ppm	Ca3179 8.5817	Cd2288 .00016
#1	-.00061	.00757	-.00140	.12510	.02204	-.00007	-.00059	9.1176	.00010
#2	-.00025	.00943	-.00041	.14393	.01944	-.00001	-.00089	8.0457	.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00036	-.00006	-.00095	.02679	1.4016	-.00077	5.2108	.00293	.00015
#2	.00002	.00028	-.00083	.02590	1.2428	.00075	5.1897	.00291	-.00036
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	3.5005	.00105	.00336	.00065	9.8966	-.00209	-.00026	.85474	1.8291
#2	3.0640	.00112	.00816	.00128	10.043	-.00232	.00446	.76860	1.6448
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00303	.03888	.00184	.00033	-.00262	.00547	.00025	.00203	.00180
#2	.00444	.03496	.00169	.00023	-.00185	.01885	.00044	.00266	.00186
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3116.7	56124.	6292.6						
#2	3117.3	56240.	6919.7						

Sample Name: 280-69708-E-4-A @2 Acquired: 5/31/2015 2:41:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00061	.03252	.01534	66.524	.02160	.00023	-.00168	379.27	-.00024
#2	-.00029	.03100	.01420	66.370	.02164	.00018	-.00145	380.08	-.00034
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00801	.00087	.00070	.00945	10.105	.07415	365.08	1.3088	.02956
#2	.00773	.00133	.00111	.00899	10.029	.07445	363.61	1.3077	.03023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	12.696	.04540	.06528	.00175	440.62	.00554	.25758	10.090	21.593
#2	12.817	.04623	.07177	.00311	440.83	.01031	.25965	10.011	21.424
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00588	1.4074	.00556	.00005	-.00714	-.05701	.00354	.02734	.00103
#2	.00508	1.3971	.00699	-.00014	-.00510	-.08630	.00403	.02763	.00195
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2817.2	51495.	6700.2						
#2	2842.0	51611.	6751.2						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 2:44:17 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm k .00732	Al3092 ppm 46.666	As1890 ppm k -.00021	B_2089 ppm k .13847	Ba4554 ppm k .00051	Be3130 ppm k .00011	Bi2230 ppm k .99170	Ca3179 ppm k .00440	Cd2288 ppm k -.00200	Co2286 ppm k .00161	Cr2055 ppm k .00044
#1	k .00703	46.781	k .00147	k .14342	k .00064	k .00014	k .99965	k .00577	k -.00217	k .00147	k .00046
#2	k .00761	46.551	k -.00189	k .13351	k .00038	k .00008	k .98374	k .00304	k -.00183	k .00174	k .00041
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm k .00757	Fe2714 ppm W 44.780	K_7664 ppm .07605	Li6707 ppm .00023	Mg2790 ppm k .04016	Mn2576 ppm k -.00051	Mo2020 ppm k -.00151	Na8183 ppm 250.32	Ni2316 ppm k .00251	P_1782 ppm k .00808	Pb2203 ppm k .00856
#1	k .00760	44.600	.08877	.00003	k .03810	k -.00047	k .00187	250.91	k .00262	k .00711	k .00854
#2	k .00754	44.960	.06333	.00043	k .04223	k -.00055	k .00115	249.73	k .00239	k .00905	k .00858
Check ? Value Range	None	Chk Warn 50.000 -10.000%	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm k 5.1320	Sb2068 ppm k -.03480	Se1960 ppm k -.00457	Si2881 ppm k -.04757	SiO2 ppm k -.10179	Sn1899 ppm k .00068	Sr4077 ppm .00031	Th2837 ppm k 5.1855	Ti3349 ppm k .01928	Tl1908 ppm k .00028	U_3701 ppm kW 10.533
#1	k 5.1677	k -.03385	k -.00222	k -.04755	k -.10175	k .00042	.00035	k 5.1901	k .01984	k .00027	k 10.536
#2	k 5.0964	k -.03575	k -.00691	k -.04759	k -.10183	k .00093	.00027	k 5.1809	k .01872	k .00029	k 10.530
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm k -.00192	Zn2062 ppm k -.00115	Zr3391 ppm k .12814								
#1	k -.00203	k -.00139	k .12675								
#2	k -.00181	k -.00091	k .12953								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3132.6	Y_3600 Cts/S 55774.	Y_3774 Cts/S 7027.5								
#1	3129.6	55776.	7023.6								
#2	3135.6	55773.	7031.4								

Sample Name: CCV-3296664 Acquired: 5/31/2015 2:47:00 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .48272	Al1670 ppm .52535	As1890 ppm 1.0367	B_2089 ppm F .63162	Ba4554 ppm .48673	Be3130 ppm .45492	Bi2230 ppm -.00050	Ca3179 ppm W 4.4903	Cd2288 ppm .51950	Co2286 ppm .51161	Cr2055 ppm .53356
#1	.47999	.52565	1.0368	.63599	.48405	.45186	.00128	4.4288	.52046	.51284	.53421
#2	.48544	.52505	1.0365	.62725	.48941	.45799	-.00228	4.5517	.51853	.51038	.53292
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Warn 5.0000 -10.000%	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .49758	Fe2599 ppm F 2.1762	K_7664 ppm 49.136	Li6707 ppm 1.0045	Mg2790 ppm 18.834	Mn2576 ppm .50358	Mo2020 ppm .50422	Na5895 ppm 5.1040	Ni2316 ppm .50475	P_1782 ppm 1.0705	Pb2203 ppm .99099
#1	.49526	2.1598	48.835	.99687	18.734	.50126	.50553	5.0796	.50721	1.0701	.99426
#2	.49990	2.1926	49.436	1.0121	18.933	.50590	.50290	5.1283	.50229	1.0709	.98772
Check ? Value Range	Chk Pass	Chk Fail 2.5000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .03842	Sb2068 ppm 1.0497	Se1960 ppm 1.0252	Si2881 ppm F 4.3554	SiO2 ppm 9.3205	Sn1899 ppm 1.0047	Sr4077 ppm .48436	Th2837 ppm .00055	Ti3349 ppm .50517	Tl1908 ppm 1.0147	U_3701 ppm -.02570
#1	.04073	1.0498	1.0246	4.3081	9.2193	1.0059	.48111	-.00098	.50301	1.0161	.00247
#2	.03611	1.0497	1.0257	4.4026	9.4217	1.0035	.48762	.00208	.50733	1.0132	-.05387
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Fail 5.0000 -10.490%	Chk Fail 10.700 -10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .51193	Zn2062 ppm .47735	Zr3391 ppm .45747								
#1	.50890	.47382	.45251								
#2	.51496	.48088	.46243								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3126.1	Y_3600 Cts/S 55697.	Y_3774 Cts/S 6978.8								
#1	3121.6	55906.	6993.9								
#2	3130.5	55489.	6963.6								

Sample Name: CCB Acquired: 5/31/2015 2:49:28 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00046	Al1670 ppm .00367	As1890 ppm -.00095	B_2089 ppm W .08021	Ba4554 ppm .00048	Be3130 ppm .00025	Bi2230 ppm .00192	Ca3179 ppm F .14795	Cd2288 ppm -.00010	Co2286 ppm .00029	Cr2055 ppm .00015
#1	-.00008	.00654	-.00392	.08553	.00049	.00013	.00115	.08191	-.00021	.00025	-.00009
#2	.00100	.00081	.00203	.07490	.00047	.00037	.00270	.21399	.00000	.00032	.00038
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn .05000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .05000 -.05000	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00110	Fe2599 ppm .01263	K_7664 ppm .05606	Li6707 ppm -.00074	Mg2790 ppm F .36464	Mn2576 ppm .00174	Mo2020 ppm .00035	Na5895 ppm .20040	Ni2316 ppm .00033	P_1782 ppm .00170	Pb2203 ppm -.00183
#1	-.00159	.00615	.02538	-.00005	.00569	-.00001	.00039	.17436	.00053	.00140	-.00231
#2	-.00061	.01911	.08673	-.00143	.72359	.00349	.00030	.22644	.00013	.00200	-.00135
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .07590	Sb2068 ppm -.00145	Se1960 ppm .00226	Si2881 ppm -.01970	SiO2 ppm -.04215	Sn1899 ppm .00124	Sr4077 ppm .00084	Th2837 ppm .00428	Ti3349 ppm .00096	Tl1908 ppm .00070	U_3701 ppm -.02589
#1	.11484	-.00024	.00143	-.02679	-.05733	.00166	.00044	.00263	.00046	.00059	-.04659
#2	.03696	-.00266	.00309	-.01261	-.02697	.00083	.00124	.00593	.00147	.00081	-.00518
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00108	Zn2062 ppm .00044	Zr3391 ppm .00274								
#1	.00103	-.00066	.00255								
#2	.00114	.00153	.00293								
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3159.5	Y_3600 Cts/S 56573.	Y_3774 Cts/S 6920.7								
#1	3159.0	56917.	6902.4								
#2	3160.0	56230.	6939.0								

Sample Name: CCVL3301032 Acquired: 5/31/2015 2:51:50 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00936	.10896	.01406	F .17784	.01009	.00102	.10723	.18669	.00547	.01076	.01118	.01439
Stddev	.00037	.00032	.00256	.00089	.00009	.00002	.00090	.00130	.00008	.00022	.00001	.00070
%RSD	3.9384	.29271	18.217	.49770	.89009	1.5257	.83963	.69663	1.3982	2.0209	.12432	4.8470
#1	.00910	.10918	.01587	.17846	.01002	.00101	.10660	.18761	.00542	.01061	.01117	.01488
#2	.00962	.10873	.01225	.17721	.01015	.00103	.10787	.18577	.00552	.01091	.01119	.01389

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 30.000%	Chk Pass							
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08769	3.1251	.00958	.20085	.01053	.02023	1.1609	.04166	3.1290	.00887	.02917	.01071
Stddev	.00042	.0135	.00136	.00235	.00008	.00003	.0065	.00047	.0052	.00004	.00071	.00141
%RSD	.47355	.43215	14.207	1.1699	.77808	.12657	.56055	1.1212	.16678	.41391	2.4268	13.147
#1	.08740	3.1346	.00862	.19918	.01047	.02021	1.1563	.04133	3.1327	.00884	.02867	.01171
#2	.08799	3.1155	.01054	.20251	.01058	.02025	1.1655	.04199	3.1254	.00890	.02967	.00971

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01611	.41522	.88857	.10339	.01022	.01716	.01055	.01656	.07206	.01080	.02030	.01510
Stddev	.00007	.00313	.00670	.00105	.00011	.00031	.00020	.00015	.01647	.00005	.00010	.00014
%RSD	.45895	.75405	.75405	1.0161	1.0982	1.8189	1.8836	.92583	22.862	.48969	.50407	.95623
#1	.01606	41743	89331	.10414	.01030	.01694	.01041	.01645	.06041	.01076	.02023	.01500
#2	.01616	.41301	.88383	.10265	.01014	.01738	.01069	.01666	.08371	.01083	.02037	.01521

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3137.2	56298.	6856.4									
Stddev	2.6	410.	10.0									
%RSD	.08332	.72819	.14577									
#1	3135.4	56588.	6849.3									
#2	3139.1	56008.	6863.5									

Sample Name: 280-69708-E-5-A @2 Acquired: 5/31/2015 2:54:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.06410	.00504	.56149	.04912	.00003	.00032	26.044	.00000
Stddev	.00030	.00123	.00228	.00073	.00015	.00006	.00061	.076	.0001
%RSD	236.11	1.9260	45.273	.13041	.31337	190.31	187.61	.29172	49545.
#1	-.00008	.06497	.00665	.56097	.04902	.00008	-.00011	25.990	-.00010
#2	.00034	.06323	.00342	.56200	.04923	-.00001	.00075	26.097	.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00063	.00003	.10612	1.8424	.06119	6.1364	.01654	.03651
Stddev	.00025	.00001	.00044	.00106	.0249	.00172	.0095	.00004	.00034
%RSD	93.583	1.0026	1527.4	.99429	1.3496	2.8149	.15440	.26767	.93620
#1	.00009	.00064	-.00028	.10687	1.8248	.05997	6.1297	.01650	.03626
#2	.00045	.00063	.00034	.10537	1.8600	.06240	6.1431	.01657	.03675
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.2648	.00256	.01279	.00164	26.835	.00160	.00287	.30130	.64479
Stddev	.0229	.00002	.00211	.00123	.435	.00140	.00138	.00385	.00824
%RSD	.70060	.66598	16.536	74.768	1.6199	87.488	48.031	1.2778	1.2778
#1	3.2486	.00254	.01129	.00251	27.142	.00259	.00190	.29858	.63896
#2	3.2810	.00257	.01428	.00077	26.527	.00061	.00385	.30402	.65061
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00453	.08834	.00247	.00186	-.00190	-.01065	.00042	.00140	.00164
Stddev	.00164	.00102	.00027	.00007	.00111	.00875	.00040	.00026	.00099
%RSD	36.336	1.1501	11.154	4.0162	58.230	82.113	93.884	18.783	60.437
#1	.00336	.08762	.00227	.00181	-.00269	-.00447	.00014	.00121	.00094
#2	.00569	.08906	.00266	.00191	-.00112	-.01684	.00071	.00158	.00234
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3099.9	56090.	6915.5						
Stddev	11.1	38.	13.3						
%RSD	.35652	.06841	.19229						
#1	3107.8	56117.	6906.1						
#2	3092.1	56063.	6924.9						

Sample Name: 280-69708-E-6-A @2 Acquired: 5/31/2015 2:57:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0034	9.1328	.00073	.19217	.01379	.00337	.00025	109.11	.00186
Stddev	.00007	.0241	.00411	.00074	.00001	.00001	.00198	.10	.00024
%RSD	19.286	.26373	564.57	.38750	.07552	.35434	793.98	.08977	12.993
#1	-.00030	9.1158	.00363	.19164	.01378	.00338	-.00115	109.04	.00169
#2	-.00039	9.1498	-.00218	.19270	.01379	.00336	.00165	109.17	.00203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11835	.00266	.07830	2.5585	1.1014	.11156	41.199	1.9505	-.00240
Stddev	.00080	.00018	.00084	.0054	.0220	.00069	.110	.0010	.00036
%RSD	.67844	6.6074	1.0670	.21123	1.9998	.62085	.26751	.04990	14.940
#1	.11892	.00254	.07889	2.5623	1.0859	.11107	41.276	1.9498	-.00265
#2	.11778	.00279	.07771	2.5546	1.1170	.11205	41.121	1.9512	-.00214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.5461	.21566	.01507	.00547	W 190.25	-.00278	.00179	1.3344	2.8555
Stddev	.0065	.00046	.00233	.00183	.03	.00020	.00571	.0090	.0193
%RSD	.09867	.21358	15.447	33.477	.01481	7.2883	318.66	.67773	.67773
#1	6.5415	.21598	.01672	.00677	190.27	-.00293	.00583	1.3280	2.8418
#2	6.5507	.21533	.01343	.00418	190.23	-.00264	-.00225	1.3408	2.8692
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00521	.19129	.00327	.00081	-.00828	-.01362	-.00042	.35031	.00247
Stddev	.00079	.00018	.00052	.00008	.00458	.01531	.00054	.00112	.00063
%RSD	15.205	.09576	16.039	9.4299	55.317	112.45	127.84	.31956	25.551
#1	.00577	.19116	.00364	.00086	-.01152	-.02445	-.00004	.35111	.00202
#2	.00465	.19141	.00290	.00076	-.00504	-.00279	-.00080	.34952	.00291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3116.7	56514.	7138.6						
Stddev	13.6	104.	4.0						
%RSD	.43559	.18317	.05565						
#1	3107.1	56588.	7135.7						
#2	3126.3	56441.	7141.4						

Sample Name: 280-69708-E-7-A @2 Acquired: 5/31/2015 2:59:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FGD

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00067	As1890 ppm .00408	B_2089 ppm .00208	Ba4554 ppm .05069	Be3130 ppm .00003	Bi2230 ppm .00008	Ca3179 ppm .00298	Cd2288 ppm .04107
#1	-.00094	.00470	-.00221	.05297	.00014	.00001	-.00288	.05724	.00015
#2	-.00040	.00345	-.00194	.04841	-.00009	.00014	-.00308	.02490	-.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00003	Cu3247 ppm .00007	Fe2599 ppm .00146	K_7664 ppm .00112	Li6707 ppm .02609	Mg2790 ppm .00027	Mn2576 ppm .03976	Mo2020 ppm .00063
#1	.00012	-.00004	-.00150	.00229	.05511	.00029	.07432	.00105	.00034
#2	-.00006	-.00010	-.00143	-.00006	-.00293	.00025	.00520	.00021	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .10222	P_1782 ppm .00020	Pb2203 ppm .00152	S_1820 ppm .00111	Sb2068 ppm .07227	Se1960 ppm .00292	Si2881 ppm .00198	SiO2 ppm .04530
#1	.10179	.00028	.00176	-.00013	.09429	-.00246	-.00285	-.04585	-.09812
#2	.10264	.00011	.00129	-.00208	.05026	-.00339	-.00111	-.04476	-.09578
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00338	Th2837 ppm .00006	Ti3349 ppm .00213	Tl1908 ppm .00034	U_3701 ppm .00127	V_2924 ppm .02836	Zn2062 ppm .00066	Zr3391 ppm .00136
#1	.00315	.00012	.00263	.00036	-.00190	-.02534	.00049	.00153	.00242
#2	.00362	.00001	.00164	.00032	-.00064	-.03137	.00083	.00120	.00147
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3133.9	Y_3774 Cts/S 56744.	377.433 {89}	377.433 {89}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
#1	3135.6	56657.	6971.4						
#2	3132.2	56831.	6974.5						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 3:02:06 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -00795	Al3092 ppm 47.561	As1890 ppm -00252	B_2089 ppm .04891	Ba4554 ppm .00061	Be3130 ppm .00009	Bi2230 ppm W 1.0604	Ca3179 ppm .04834	Cd2288 ppm -.00028	Co2286 ppm -.00029	Cr2055 ppm .00048
#1	-.00755	47.476	.00017	.04905	.00071	.00007	1.0649	.06862	-.00011	-.00049	.00051
#2	-.00834	47.646	-.00521	.04877	.00051	.00010	1.0559	.02806	-.00045	-.00009	.00045
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 5.0000%	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00199	Fe2714 ppm 45.782	K_7664 ppm .04839	Li6707 ppm .00000	Mg2790 ppm .05370	Mn2576 ppm -.00159	Mo2020 ppm -.00039	Na8183 ppm 254.93	Ni2316 ppm .00219	P_1782 ppm .00681	Pb2203 ppm .00038
#1	-.00194	45.511	.04694	-.00018	.04027	-.00171	-.00038	253.83	.00221	.00435	.00073
#2	-.00205	46.053	.04983	.00018	.06712	-.00147	-.00040	256.04	.00217	.00928	.00003
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 5.1992	Sb2068 ppm -.01307	Se1960 ppm .00800	Si2881 ppm -.04696	SiO2 ppm -.10048	Sn1899 ppm -.00150	Sr4077 ppm .00040	Th2837 ppm 5.0182	Ti3349 ppm -.01170	Tl1908 ppm .00147	U_3701 ppm W 10.825
#1	5.2026	-.01322	.00544	-.04636	-.09921	-.00270	.00043	5.0189	-.01185	-.00015	10.826
#2	5.1958	-.01292	.01057	-.04755	-.10176	-.00029	.00036	5.0175	-.01155	.00309	10.824
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	None
Elem Units Avg Stddev %RSD	V_2924 ppm .00349	Zn2062 ppm -.00095	Zr3391 ppm -.13316								
#1	.00363	-.00118	-.13421								
#2	.00336	-.00072	-.13212								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3078.9	Y_3600 Cts/S 54639.	Y_3774 Cts/S 6845.2								
#1	3081.9	54591.	6882.7								
#2	3076.0	54688.	6807.7								

Sample Name: CCV-3296664 Acquired: 5/31/2015 3:04:47 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49021	Al1670 ppm .53819	As1890 ppm 1.0374	B_2089 ppm F .58876	Ba4554 ppm .49573	Be3130 ppm .46250	Bi2230 ppm .00038	Ca3179 ppm 4.5650	Cd2288 ppm .52320	Co2286 ppm .51847	Cr2055 ppm .53200	Cu3247 ppm .50652
#1	.48913	.53802	1.0303	.58687	.49596	.46302	-.00098	4.5820	.52172	.51807	.53137	.50597
#2	.49128	.53835	1.0446	.59065	.49550	.46198	.00174	4.5480	.52467	.51886	.53263	.50706
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Fe2599 ppm F 2.2001	K_7664 ppm 49.856	Li6707 ppm 1.0170	Mg2790 ppm 19.069	Mn2576 ppm .50450	Mo2020 ppm .50950	Na5895 ppm 5.1838	Ni2316 ppm .51116	P_1782 ppm 1.0839	Pb2203 ppm 1.0087	S_1820 ppm .02936	Sb2068 ppm 1.0669
#1	2.2165	49.874	1.0175	19.041	.50445	.50883	5.1870	.51101	1.0786	1.0048	.03668	1.0585
#2	2.1837	49.837	1.0165	19.097	.50456	.51017	5.1806	.51132	1.0892	1.0126	.02203	1.0753
Check ? Value Range	Chk Fail 2.5000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units Avg Stddev %RSD	Se1960 ppm 1.0474	Si2881 ppm F 4.3905	SiO2 ppm F 9.3956	Sn1899 ppm 1.0213	Sr4077 ppm .49210	Th2837 ppm -.00025	Ti3349 ppm .50604	TI1908 ppm 1.0340	U_3701 ppm -.01957	V_2924 ppm .52118	Zn2062 ppm .47604	Zr3391 ppm .46410
#1	1.0378	4.3958	9.4071	1.0213	.49224	.00010	.50644	1.0257	-.01797	.52042	.47714	.46743
#2	1.0570	4.3851	9.3841	1.0213	.49195	-.00061	.50564	1.0424	-.02117	.52194	.47494	.46078
Check ? Value Range	Chk Pass	Chk Fail 5.0000 -10.490%	Chk Fail 10.700 -10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3084.5	Y_3600 Cts/S 54903.	Y_3774 Cts/S 6756.1									
#1	3084.2	54925.	6800.5									
#2	3084.9	54881.	6711.6									

Sample Name: CCB Acquired: 5/31/2015 3:07:15 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0089	.00018	-0.00354	.04124	-0.00013	.00007	.00048	-0.0021	.00000	.00017	-0.0006	-0.0089	-0.0165
Stddev	.00021	.00009	.00300	.00006	.00009	.00007	.00188	.00050	.0000	.00001	.00003	.00010	.00096
%RSD	23.471	47.539	84.791	.15187	68.802	103.33	393.58	233.77	626.22	5.7297	45.049	10.829	57.848
#1	-.00104	.00024	-.00142	.04128	-.00019	.00002	-.00085	.00014	-.00001	.00018	-.00004	-.00096	-.00098
#2	-.00074	.00012	-.00566	.04119	-.00007	.00013	.00181	-.00056	.00001	.00017	-.00008	-.00083	-.00233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04510	-.00131	-.00070	-.00003	.00019	.09197	-.00004	.00315	-.00129	.02005	-.00068	.00287	-.02701
Stddev	.02529	.00089	.00193	.00002	.00022	.00396	.00062	.00392	.00126	.00375	.00364	.00084	.00266
%RSD	56.071	68.243	274.22	46.905	115.14	4.3080	1398.1	124.30	98.027	18.689	534.34	29.394	9.8474
#1	.02722	-.00194	.00066	-.00004	.00004	.09477	-.00048	.00038	-.00040	.01740	.00189	.00347	-.02889
#2	.06299	-.00068	-.00207	-.00002	.00035	.08917	.00039	.00592	-.00218	.02270	-.00325	.00228	-.02513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	-.05781	-.00003	.00002	.00223	.00033	.00009	-.01060	.00021	.00027	.00069			
Stddev	.00569	.00164	.00003	.00065	.00081	.00161	.00171	.00014	.00034	.00021			
%RSD	9.8474	5965.8	115.76	29.149	246.24	1751.7	16.139	65.802	126.26	29.928			
#1	-.06183	-.00119	.00000	.00177	.00090	.00123	-.00939	.00031	.00051	.00055			
#2	-.05378	.00113	.00005	.00269	-.00024	-.00105	-.01181	.00011	.00003	.00084			
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass			
High Limit													
Low Limit													
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3111.5	55767.	6722.9										
Stddev	.3	147.	29.0										
%RSD	.01053	.26441	.43203										
#1	3111.7	55872.	6702.4										
#2	3111.3	55663.	6743.4										

Sample Name: CCVL3301032 Acquired: 5/31/2015 3:09:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm .00980	Al1670 ppm .11107	As1890 ppm .01762	B_2089 ppm F .15130	Ba4554 ppm .01022	Be3130 ppm .00103	Bi2230 ppm .11010	Ca3179 ppm .18724	Cd2288 ppm .00537	Co2286 ppm .01076	Cr2055 ppm .01086	Cu3247 ppm .01438
Stddev	.00033	.00034	.00205	.00054	.00009	.00010	.00138	.00465	.00002	.00010	.00007	.00018
%RSD	3.3971	.30319	11.638	.35388	.91849	10.126	1.2542	2.4853	.27993	.89955	.60037	1.2642
#1	.00957	.11083	.01617	.15168	.01015	.00095	.10913	.18395	.00535	.01070	.01081	.01451

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 30.000%	Chk Pass							

Elem Units	Fe2599 ppm .08765	K_7664 ppm 3.1163	Li6707 ppm .01058	Mg2790 ppm .20173	Mn2576 ppm .01061	Mo2020 ppm .02093	Na5895 ppm 1.1446	Ni2316 ppm .04210	P_1782 ppm 3.1798	Pb2203 ppm .00923	S_1820 ppm .01678	Sb2068 ppm .00843
Stddev	.00033	.0142	.00115	.00246	.00001	.00024	.0053	.00003	.0243	.00105	.00324	.00154
%RSD	.37807	.45698	10.884	1.2189	.08911	1.1637	.46572	.08182	.76363	11.360	19.338	18.254
#1	.08741	3.1062	.01140	.20347	.01062	.02110	1.1409	.04208	3.1627	.00997	.01907	.00734
#2	.08788	3.1264	.00977	.19999	.01060	.02076	1.1484	.04213	3.1970	.00849	.01449	.00952

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm .01605	Si2881 ppm .40466	SiO2 ppm .86597	Sn1899 ppm .10556	Sr4077 ppm .01012	Th2837 ppm .01805	Ti3349 ppm .01054	Tl1908 ppm .01534	U_3701 ppm F .03442	V_2924 ppm .01040	Zn2062 ppm .02126	Zr3391 ppm .01564
Stddev	.00263	.00225	.00482	.00078	.00017	.00005	.00026	.00206	.01421	.00086	.00044	.00058
%RSD	16.396	.55680	.55680	.73953	1.6451	.28159	2.4476	13.409	41.279	8.2199	2.0639	3.7148
#1	.01419	40307	.86257	.10500	.01000	.01809	.01072	.01679	.02437	.00980	.02157	.01605
#2	.01791	.40625	.86938	.10611	.01024	.01802	.01036	.01388	.04447	.01101	.02095	.01523

Check ? Value Range	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass							

Int. Std. Units	Y_2243 Cts/S 3104.4	Y_3600 Cts/S 55787.	Y_3774 Cts/S 6738.2									
Avg	4.5	334.	2.0									
Stddev	.14441	.59882	.03012									

#1	3101.2	56023.	6739.6									
#2	3107.5	55551.	6736.8									

Sample Name: MB 280-279412/1-A Acquired: 5/31/2015 3:12:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	.00579	.00308	.03322	.00001	.00010	-.00101	.01092	-.00021
Stddev	.00018	.00017	.00387	.00177	.00024	.00003	.00141	.00058	.00019
%RSD	27.732	2.9499	125.61	5.3152	3153.5	24.566	139.05	5.3068	88.636
#1	-.00054	.00567	.00582	.03447	.00018	.00012	-.00201	.01133	-.00035
#2	-.00080	.00591	.00034	.03197	-.00016	.00008	-.00002	.01051	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	-.00009	-.00127	.01814	.02878	-.00069	.00313	.00023	.00034
Stddev	.00009	.00002	.00029	.00125	.02389	.00122	.00130	.00003	.00007
%RSD	65.436	24.682	22.783	6.8705	83.026	176.32	41.425	11.252	19.533
#1	.00007	-.00010	-.00106	.01902	.04568	.00017	.00221	.00025	.00039
#2	.00020	-.00007	-.00147	.01726	.01188	-.00156	.00404	.00021	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08881	-.00033	.00283	-.00134	.02157	-.00408	-.00163	-.01721	-.03684
Stddev	.00249	.00012	.00116	.00005	.00138	.00201	.00133	.02183	.04671
%RSD	2.8003	36.904	40.827	3.8724	6.4132	49.316	81.890	126.78	126.78
#1	.09056	-.00041	.00365	-.00138	.02255	-.00265	-.00257	-.03265	-.06987
#2	.08705	-.00024	.00201	-.00130	.02059	-.00550	-.00068	-.00178	-.00381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	.00004	.00132	.00042	-.00116	-.00622	.00051	.00044	.00111
Stddev	.00056	.00006	.00055	.00014	.00154	.02624	.00055	.00044	.00076
%RSD	349.59	148.35	41.329	33.442	132.22	422.19	107.22	99.887	67.855
#1	.00024	.00009	.00171	.00032	-.00225	-.02477	.00091	.00074	.00165
#2	-.00056	.00000	.00093	.00052	-.00008	.01234	.00012	.00013	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3160.7	57069.	6811.9						
Stddev	6.3	226.	72.2						
%RSD	.19979	.39662	1.0605						
#1	3156.2	57229.	6760.8						
#2	3165.2	56909.	6863.0						

Sample Name: LCS 280-279412/2-A Acquired: 5/31/2015 3:14:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0013	As1890 ppm 1.0456	B_2089 F 1.1433	Ba4554 455.403 { 74}	Be3130 ppm .04642	Bi2230 ppm 2.1178	Ca3179 F 44.663	Cd2288 .138
#1	.04488	1.9996	1.0483	1.1417	2.0060	.04639	2.1176	44.566	.10585
#2	.04513	2.0030	1.0430	1.1448	2.0055	.04646	2.1180	44.760	.10639
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.1050 .86000	Chk Pass	Chk Pass	None	Chk Fail 55.500 44.750	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F .20704	Cu3247 ppm .25427	Fe2599 F .87205	K_7664 766.490 { 44}	Li6707 ppm 1.0271	Mg2790 ppm 47.464	Mn2576 ppm .50156	Mo2020 ppm 1.0558
#1	.50370	.20666	.25290	.87008	50.680	1.0260	47.366	.50254	1.0552
#2	.50292	.20742	.25565	.87403	50.689	1.0283	47.562	.50059	1.0565
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Fail 1.1500 .89000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 { 41}	Ni2316 ppm 55.178	P_1782 ppm .49645	Pb2203 F 11.176	S_1820 .50443	Sb2068 2.1723	Se1960 F .55872	Si2881 2.1864	SiO2 9.0037
#1	55.042	.49630	11.165	.50304	2.1608	.55186	2.1782	8.9532	19.160
#2	55.314	.49660	11.187	.50582	2.1838	.56558	2.1945	9.0541	19.376
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Fail 11.100 9.1000	Chk Pass	None	Chk Fail .55499 .44000	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.0529	Th2837 ppm .99332	Ti3349 1.0168	Tl1908 ppm 1.0134	U_3701 2.0713	V_2924 2.1536	Zn2062 .51311	Zr3391 .46337
#1	2.0487	.99326	1.0174	1.0133	2.0611	2.1495	.51358	.46609	.44961
#2	2.0571	.99339	1.0162	1.0134	2.0815	2.1577	.51265	.46064	.45246
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3057.1	Y_3774 Cts/S 54981.	377.433 { 89}					
#1	3062.0	54875.	6887.7						
#2	3052.3	55087.	25.3						

Sample Name: LCSD 280-279412/3-A Acquired: 5/31/2015 3:17:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04469	1.9835	1.0369	F 1.1278	1.9923	.04614	2.0975	F 44.311	.10511
Stddev	.00031	.0024	.0073	.0006	.0006	.00011	.0078	.073	.00006
%RSD	.68758	.11943	.70478	.05723	.02760	.23823	.37202	.16397	.05371
#1	.04490	1.9851	1.0421	1.1283	1.9927	.04606	2.1030	44.362	.10507
#2	.04447	1.9818	1.0318	1.1274	1.9919	.04622	2.0920	44.260	.10515
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.1050 .86000	Chk Pass	Chk Pass	None	Chk Fail 55.500 44.750	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50217	F .20567	.25324	F .86993	50.407	1.0223	46.987	.49836	1.0582
Stddev	.00011	.00078	.00060	.00264	.086	.0036	.048	.00255	.0013
%RSD	.02262	.37943	.23687	.30389	.17105	.35476	.10165	.51197	.12591
#1	.50209	.20512	.25281	.86807	50.468	1.0248	46.953	.49655	1.0592
#2	.50226	.20623	.25366	.87180	50.346	1.0197	47.020	.50016	1.0573
Check ?	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Fail 1.1500 .89000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.610	.49370	11.010	.50004	2.1501	W .54791	2.1384	F 8.8971	19.040
Stddev	.295	.00059	.029	.00213	.0062	.00210	.0069	.0686	.147
%RSD	.54053	.11860	.26189	.42567	.28924	.38377	.32179	.77090	.77090
#1	54.401	.49329	11.030	.49854	2.1545	.54643	2.1336	8.8486	18.936
#2	54.818	.49412	10.989	.50155	2.1457	.54940	2.1433	8.9456	19.144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn .54000 .44000	Chk Pass	Chk Fail 11.000 9.0000	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0334	.98755	1.0137	1.0129	2.0357	2.1249	.51423	.45807	.44347
Stddev	.0063	.00117	.0006	.0022	.0052	.0128	.00263	.00286	.00339
%RSD	.31227	.11859	.05819	.22249	.25402	.60270	.51201	.62469	.76473
#1	2.0289	.98838	1.0133	1.0113	2.0320	2.1339	.51237	.45605	.44107
#2	2.0379	.98672	1.0141	1.0145	2.0393	2.1158	.51610	.46009	.44586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3030.5	54493.	6854.0						
Stddev	2.6	124.	5.7						
%RSD	.08502	.22770	.08362						
#1	3028.7	54580.	6849.9						
#2	3032.4	54405.	6858.0						

Sample Name: 280-69777-A-1-A Acquired: 5/31/2015 3:19:30 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00756	11.021	.01083	4.1054	.07775	.00045	.00284	85.720	1.4504
Stddev	.00029	.094	.00192	.0063	.00030	.00002	.00048	.027	.0006
%RSD	3.8607	.85033	17.777	.15257	.39159	4.4267	16.752	.03176	.04138
#1	.00735	11.087	.00947	4.1099	.07797	.00044	.00318	85.739	1.4508
#2	.00776	10.955	.01219	4.1010	.07754	.00047	.00250	85.701	1.4500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04186	.04930	W 15.618	6.8711	W 384.01	.03301	31.990	.56713	2.3513
Stddev	.00048	.00013	.043	.0452	1.28	.00062	.104	.00050	.0047
%RSD	1.1544	.26847	.27366	.65791	.33383	1.8834	.32414	.08743	.19823
#1	.04152	.04921	15.648	6.8391	384.91	.03257	32.063	.56678	2.3546
#2	.04220	.04939	15.588	6.9030	383.10	.03345	31.917	.56748	2.3480
Check ?	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1462.0	.02654	F 101.56	.00991	F 1738.6	.04250	.04842	10.439	22.340
Stddev	.8	.00008	.23	.00182	4.0	.00208	.00265	.167	.357
%RSD	.05159	.30884	.22871	18.333	.23154	4.8897	5.4643	1.5988	1.5988
#1	1461.5	.02648	101.72	.00863	1741.4	.04397	.05029	10.321	22.087
#2	1462.5	.02659	101.39	.01120	1735.7	.04103	.04655	10.557	22.592
Check ?	Chk Warn 500.00	Chk Pass	Chk Fail 50.000 -2.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17294	.73021	.00426	.09746	-.00785	-.02932	.04637	.13603	.01263
Stddev	.00116	.00082	.00114	.00135	.00005	.00977	.00013	.00191	.00070
%RSD	.67264	.11186	26.712	1.3828	.68443	33.326	.27368	1.4038	5.5694
#1	.17212	.72964	.00507	.09841	-.00781	-.03622	.04628	.13738	.01213
#2	.17376	.73079	.00346	.09650	-.00789	-.02241	.04646	.13468	.01312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2850.8	50367.	6862.6						
Stddev	2.4	57.	12.5						
%RSD	.08312	.11272	.18282						
#1	2852.5	50407.	6853.8						
#2	2849.1	50327.	6871.5						

Sample Name: 280-69777-B-2-A Acquired: 5/31/2015 3:22:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00056	7.1855	.05472	1.7398	1.0587	.00021	.00329	149.50	.00653
#2	.00005	7.2160	.04558	1.7490	1.0574	.00010	.00199	149.83	.00689
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.02475	.42568	.70959	27.460	233.80	.12699	43.910	1.4476	.34386
#2	.02544	.42989	.70504	27.582	234.70	.13081	43.926	1.4478	.34449
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	367.74	.14384	.92239	.12380	551.57	.02012	.01024	11.800	25.252
#2	368.21	.14495	.91791	.12478	553.63	.02000	.00962	11.861	25.383
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.13030	1.1380	.00812	.07426	-.01057	-.03978	.01702	1.7625	.00585
#2	.13209	1.1389	.00938	.07443	-.00716	-.04245	.01739	1.7805	.00794
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2911.3	52073.	6909.6						
#2	2921.6	51775.	6794.9						

Sample Name: 280-69777-A-3-A Acquired: 5/31/2015 3:25:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm W .29149 .00059 .20196	As1890 309.271 {109}	B_2089 189.042 {478}	Ba4554 455.403 { 74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.29107	185.58	7.2915	2.2989	7.0097	.05983	1.8978	1226.0	6.4477
#2	.29191	185.75	7.2689	2.2943	6.9771	.05986	1.8915	1233.7	6.4306
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Fail 1000.0 -.10000	Chk Warn 2.0000 -.00500	Chk Warn
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm W 11.244 .026 .23273	Cu3247 205.560 {464}	Fe2714 324.754 {104}	K_7664 766.490 { 44}	Li6707 670.784 { 50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	11.262	22.063	34.347	815.60	99.864	46120	239.35	44.112	55.480
#2	11.225	21.926	34.051	815.68	99.841	.46448	239.55	43.978	55.258
Check ? High Limit Low Limit	Chk Warn 1.0000 -.01000	Chk Fail 1.0000 -.02000	Chk Warn 10.000 -.01000	Chk Warn 500.00 40.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 20.000 -.02000	Chk Fail 20.000 -.02000
Elem Line Units Avg Stddev 	Na8183 818.326 { 41}	Ni2316 ppm W 1272.9 .5 .03813	P_1782 231.604 {446}	Pb2203 178.284 {489}	S_1820 220.353 {453}	Sb2068 182.034 {485}	Se1960 206.833 {463}	Si2881 196.090 {472}	SiO2 288.158 {117}288.158 {117}2
#1	1272.6	6.6749	24.004	91.770	523.35	2.4981	.57535	155.36	332.47
#2	1273.3	6.6538	23.909	91.450	522.49	2.4737	.57661	154.40	330.42
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Warn 10.000 -.00300	Chk Fail 200.00 -.20000	Chk Warn 2.0000 -.01000	Chk Pass	Chk Warn 50.000 -.10000	Chk Warn 107.00 -.21400
Elem Line Units Avg Stddev 	Sn1899 189.989 {477}	Sr4077 ppm W 12.794 .037 .28982	Th2837 407.771 { 83}	Ti3349 283.730 {119}	Tl1908 334.904 {101}	U_3701 190.856 {477}	V_2924 370.152 { 91}	Zn2062 292.402 {115}	Zr3391 206.200 {163}
#1	12.820	7.2299	.10475	4.1513	.05453	-.64883	1.2290	186.77	.14507
#2	12.767	7.2509	.10890	4.1616	.05488	-.67421	1.2307	185.93	.14500
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Fail 50.000 -.02000	Chk Pass
Int. Std. Line Units Avg Stddev 	Y_2243 224.306 {450}	Y_3600 Cts/S 3132.4	Y_3774 Cts/S 58697.						
#1	3134.9	58746.	8145.1						
#2	3129.8	58647.	8163.8						

Sample Name: 280-69777-A-4-A Acquired: 5/31/2015 3:29:27 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	8.3454	.02678	4.5801	.48738	.00017	.00111	231.04	.00160
Stddev	.00022	.0740	.00397	.0126	.00078	.00002	.00155	2.07	.00016
%RSD	31.905	.88668	14.815	.27519	.15923	9.9452	138.94	.89557	10.268
#1	.00084	8.3977	.02958	4.5890	.48793	.00018	.00221	232.51	.00148
#2	.00053	8.2931	.02397	4.5712	.48683	.00015	.00002	229.58	.00171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00720	.07294	.44723	20.452	W 141.04	.11797	54.484	2.7855	.05071
Stddev	.00065	.00012	.00107	.078	.56	.00080	.013	.0016	.00093
%RSD	9.0301	.16333	.23950	.37947	.39798	.68189	.02437	.05874	1.8320
#1	.00765	.07303	.44799	20.507	141.43	.11854	54.475	2.7867	.05136
#2	.00674	.07286	.44647	20.397	140.64	.11740	54.493	2.7843	.05005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 648.50	.04615	W 33.275	.06317	F 207.87	.00905	.03529	18.393	39.361
Stddev	2.07	.00067	.088	.00142	.48	.00235	.00346	.024	.051
%RSD	.31907	1.4615	.26534	2.2435	.23200	26.002	9.8069	.13047	.13047
#1	649.96	.04663	33.338	.06417	208.21	.00739	.03284	18.410	39.397
#2	647.04	.04567	33.213	.06216	207.53	.01072	.03774	18.376	39.324
Check ?	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04143	2.4563	.00668	1.8765	-.00879	-.00061	.01645	.91499	.00644
Stddev	.00173	.0080	.00233	.0009	.00069	.03709	.00020	.00618	.00020
%RSD	4.1753	.32748	34.953	.04755	7.8102	6080.9	1.2037	.67529	3.0850
#1	.04020	2.4620	.00833	1.8759	-.00830	-.02684	.01659	.91062	.00658
#2	.04265	2.4506	.00503	1.8771	-.00927	.02562	.01631	.91936	.00630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2893.7	51471.	6786.8						
Stddev	3.4	60.	31.6						
%RSD	.11890	.11713	.46548						
#1	2891.2	51513.	6764.5						
#2	2896.1	51428.	6809.1						

Sample Name: 280-69777-A-5-A Acquired: 5/31/2015 3:32:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00066	As1890 ppm 24.383	B_2089 ppm .07456	Ba4554 ppm .35719	Be3130 ppm .00065	Bi2230 ppm .02072	Ca3179 ppm 312.29	Cd2288 ppm .00486
#1	.00032	24.465	.07675	4.0000	.35891	.00063	.02110	312.26	.00502
#2	.00101	24.302	.07236	3.8566	.35546	.00068	.02033	312.32	.00470
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .02706	Cu3247 ppm W .29922	Fe2714 ppm 1.7383	K_7664 ppm 46.749	Li6707 ppm 36.686	Mg2790 ppm .20049	Mn2576 ppm 69.543	Mo2020 ppm 2.4051
#1	.02699	.30142	1.7471	46.812	36.802	.19941	69.647	2.4031	.16266
#2	.02712	.29702	1.7296	46.686	36.571	.20156	69.439	2.4071	.15647
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 820.67	P_1782 ppm .15478	Pb2203 ppm W 2.0217	S_1820 ppm .14605	Sb2068 ppm F 908.35	Se1960 ppm .01203	Si2881 ppm .02904	SiO2 ppm 32.544
#1	823.56	.15698	2.0567	.14909	925.88	.01567	.03180	32.637	69.842
#2	817.78	.15259	1.9868	.14301	890.82	.00839	.02629	32.450	69.444
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .14346	Th2837 ppm 2.8626	Ti3349 ppm .01243	Tl1908 ppm .27248	U_3701 ppm W -.01113	V_2924 ppm -.04844	Zn2062 ppm .04779	Zr3391 ppm 6.2558
#1	.14459	2.8759	.01056	.27237	-.01020	-.01557	.04796	6.2319	.01732
#2	.14233	2.8493	.01431	.27258	-.01206	-.08130	.04762	6.2797	.01871
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2803.1	Y_3774 Cts/S 52341.	377.433 {89}				Zn2062 ppm 6.2558	Zr3391 ppm .01801
#1	2779.5	52434.	6780.7						
#2	2826.8	52248.	6800.8						

Sample Name: 280-69777-A-6-A Acquired: 5/31/2015 3:34:50 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00249	As1890 ppm 11.936	B_2089 ppm .04938	Ba4554 ppm 6.6825	Be3130 ppm 1.5240	Bi2230 ppm .00088	Ca3179 ppm W 943.09	Cd2288 ppm .00360
#1	.00204	12.020	.04776	6.6722	1.5319	.00089	.01165	944.16	.00376
#2	.00295	11.853	.05100	6.6928	1.5161	.00086	.01102	942.03	.00344
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .01373	Cu3247 ppm W .30913	Fe2714 ppm .87822	K_7664 ppm 50.983	Li6707 ppm 43.981	Mg2790 ppm 48219	Mn2576 ppm 115.58	Mo2020 ppm 2.3213
#1	.01318	.31003	.88245	51.273	44.228	.48336	116.04	2.3269	.13949
#2	.01428	.30823	.87399	50.692	43.735	.48102	115.11	2.3156	.14331
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1574.7	P_1782 ppm .16099	Pb2203 ppm 1.8438	S_1820 ppm .12507	Sb2068 ppm F 1815.0	Se1960 ppm .02723	Si2881 ppm .16712	SiO2 ppm 27.935
#1	1582.2	.16034	1.8382	.12127	1810.1	.02608	.16526	28.101	60.137
#2	1567.3	.16164	1.8494	.12887	1820.0	.02839	.16898	27.768	59.423
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .26322	Th2837 ppm W 5.6610	Ti3349 ppm .00861	Tl1908 ppm .27667	U_3701 ppm W -.01185	V_2924 ppm -.02008	Zn2062 ppm .04447	Zr3391 ppm W 14.224
#1	.26108	5.6958	.00795	.27638	-.01472	-.02126	.04470	14.288	.16232
#2	.26537	5.6262	.00926	.27697	-.00897	-.01890	.04424	14.161	.15868
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Warn 10.000 -.00500	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2654.8	Y_3774 Cts/S 47661.	377.433 {89}					
#1	2672.2	47634.	6508.4						
#2	2637.4	47687.	6542.7						

Sample Name: 280-69777-A-7-A Acquired: 5/31/2015 3:38:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00376	As1890 ppm 13.488	B_2089 ppm .17609	Ba4554 ppm W 10.782	Be3130 ppm .1107	Bi2230 ppm .00074	Ca3179 ppm .00863	Cd2288 ppm 429.29
#1	.00363	13.519	.17725	10.794	1.1100	.00079	.00791	431.14	.00505
#2	.00390	13.458	.17492	10.771	1.1114	.00069	.00934	427.45	.00580
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .02430	Cu3247 ppm W .32011	Fe2599 ppm .85988	K_7664 ppm 766.490 {44}	Li6707 ppm W 182.37	Mg2790 ppm .28567	Mn2576 ppm 144.12	Mo2020 ppm 4.7773
#1	.02443	.31925	.85792	38.054	182.76	.28465	144.23	4.7792	.31663
#2	.02418	.32098	.86183	37.894	181.99	.28670	144.01	4.7753	.31884
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 2751.7	P_1782 ppm .51921	Pb2203 ppm W 8.4353	S_1820 ppm .09359	Sb2068 ppm F 734.73	Se1960 ppm .02843	Si2881 ppm .09386	SiO2 ppm 31.521
#1	2751.8	.51771	8.3970	.09338	736.87	.02981	.09662	31.559	67.535
#2	2751.6	.52070	8.4735	.09379	732.60	.02705	.09110	31.484	67.375
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .19195	Th2837 ppm 4.7832	Ti3349 ppm .01118	Tl1908 ppm .33368	U_3701 ppm -.00954	V_2924 ppm -.03701	Zn2062 ppm .04702	Zr3391 ppm 4.2921
#1	.19040	4.8745	.01214	.33562	-.00864	-.04940	.04767	4.3277	.03457
#2	.19349	4.6919	.01022	.33174	-.01045	-.02463	.04637	4.2565	.03408
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2628.1	Y_3774 Cts/S 45771.	377.433 {89}				Zn2062 ppm 4.2921	Zr3391 ppm .03432
#1	2630.0	45709.	6176.1						
#2	2626.3	45833.	6241.7						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 3:42:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	k .00012	45.362	k .00128	k .03509	k .00052	k .00010	k .98811	k .05556	k .00113	k .00054	k .00055	k .00279
Stddev	.01004	.155	.00365	.00036	.00006	.00003	.02861	.02520	.00136	.00128	.00014	.00683
%RSD	8187.6	.34097	286.52	1.0145	11.096	34.257	2.8950	45.361	120.30	235.74	25.740	244.28
#1												
#2												

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	F 39.929	.32024	.00221	k .04527	k -.00081	k -.00074	249.20	k .00204	k .01053	k .00488	k 5.0438	k -.02463
Stddev	.106	.05059	.00128	.01477	.00068	.00091	.39	.00055	.00228	.00531	.0246	.01826
#1												
#2												

Check ? Value Range	Chk Fail 50.000	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
-10.490%												

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	k .00078	-.03280	-.07018	k -.00063	.00073	k 4.9683	k .00363	k .00145	k 10.317	k .00078	k .00076	k -.00682
Stddev	.00610	.00656	.01405	.00101	.00048	.1837	.02146	.00038	.015	.00439	.00100	.18146
#1												
#2												

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
-10.490%												

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3084.5	54044.	6567.9									
Stddev	6.5	84.	62.4									
%RSD	.20951	.15624	.95083									
#1												
#2												

3080.0	54104.	6612.0										
3089.1	53984.	6523.7										

Sample Name: CCV-3296664 Acquired: 5/31/2015 3:45:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .46986	Al1670 ppm .51310	As1890 ppm .99954	B_2089 ppm W .55127	Ba4554 ppm .48095	Be3130 ppm F .44241	Bi2230 ppm .00050	Ca3179 ppm 4.7471	Cd2288 ppm .50677	Co2286 ppm .49866	Cr2055 ppm .51592
#1	.46702	.51252	1.0009	.54965	.47944	.44171	.00005	4.8273	.50700	.49798	.51536
#2	.47270	.51368	.99819	.55288	.48245	.44311	.00095	4.6669	.50654	.49933	.51648
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Warn .50000 10.000%	Chk Pass	Chk Fail .50000 -10.490%	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .48329	Fe2599 ppm F 2.2043	K_7664 ppm 49.036	Li6707 ppm .99361	Mg2790 ppm 18.204	Mn2576 ppm .48309	Mo2020 ppm .49060	Na5895 ppm F 6.1686	Ni2316 ppm .49135	P_1782 ppm 1.0511	Pb2203 ppm .97073
#1	.48169	2.2268	48.929	.98962	18.128	.47970	.48924	6.3765	.49137	1.0523	.96863
#2	.48490	2.1818	49.143	.99760	18.279	.48647	.49196	5.9607	.49133	1.0500	.97283
Check ? Value Range	Chk Pass	Chk Fail 2.5000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 5.0000 10.490%	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm .10392	Sb2068 ppm 1.0283	Se1960 ppm 1.0075	Si2881 ppm F 4.3087	SiO2 ppm F 9.2207	Sn1899 ppm .98017	Sr4077 ppm .47706	Th2837 ppm .00055	Ti3349 ppm .48391	TI1908 ppm 1.0017	U_3701 ppm -.00733
#1	.10379	1.0282	1.0061	4.2860	9.1721	.97949	.47602	-.00090	.48157	.99682	.01239
#2	.10404	1.0283	1.0090	4.3315	9.2693	.98085	.47810	.00199	.48625	1.0065	-.02704
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Fail 5.0000 -10.490%	Chk Fail 10.700 -10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .49714	Zn2062 ppm .45869	Zr3391 ppm .45182								
#1	.49368	.45622	.45037								
#2	.50060	.46116	.45327								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3115.1	Y_3600 Cts/S 55657.	Y_3774 Cts/S 6632.9								
#1	3116.4	55810.	6639.5								
#2	3113.8	55504.	6626.2								

Sample Name: CCB Acquired: 5/31/2015 3:47:51 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.0060	-0.0032	.00112	.02462	.00017	.00012	.00188	.00351	-.00022	.00003	.00005	-.00139	.00061
Stddev	.00019	.00019	.00117	.00065	.00034	.00003	.00381	.00615	.00012	.00018	.00003	.00030	.00578
%RSD	31.793	60.882	104.22	2.6425	199.33	22.267	202.19	175.54	53.736	541.66	67.004	21.373	945.02

#1	-.00046	-.00018	.00030	.02508	-.00007	.00014	-.00081	-.00085	-.00014	.00016	.00008	-.00118	-.00347
#2	-.00073	-.00045	.00195	.02416	-.00041	.00010	.00458	.00786	-.00031	-.00009	.00003	-.00160	.00470

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.13357	.00149	-.00027	-.00003	.00023	.34993	-.00017	.00034	-.00058	.08818	-.00181	-.00126	-.02504
Stddev	.01103	.00052	.00011	.00001	.00011	.04165	.00022	.00147	.00051	.00134	.00174	.00260	.00208
%RSD	8.2568	34.996	40.536	22.823	50.622	11.903	129.31	426.96	86.960	1.5185	95.878	205.81	8.3135

#1	.12577	.00186	-.00035	-.00004	.00031	.32048	-.00033	.00138	-.00022	.08913	-.00304	.00058	-.02651
#2	.14137	.00112	-.00019	-.00003	.00015	.37938	-.00001	-.00069	-.00094	.08723	-.00058	-.00310	-.02356
Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.05358	.00022	.00010	.00237	.00048	-.00065	-.00536	.00011	.00045	.00286			
Stddev	.00445	.00040	.00018	.00027	.00004	.00152	.00356	.00071	.00000	.00067			
%RSD	8.3135	184.17	176.66	11.499	7.3831	233.82	66.450	624.87	.36257	23.561			

#1	-.05673	.00050	-.00003	.00256	.00050	.00042	-.00284	.00062	.00045	.00334			
#2	-.05043	-.00007	.00023	.00218	.00045	-.00173	-.00787	-.00039	.00045	.00238			
Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3155.9	56477.	6636.4										
Stddev	1.0	47.	9.9										
%RSD	.03288	.08336	.14879										

#1	3155.1	56444.	6629.4										
#2	3156.6	56511.	6643.4										

Sample Name: CCVL3301032II Acquired: 5/31/2015 3:50:13 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm	K_7664 ppm
Avg	.00965	.10828	.01535	.12965	.00987	.00092	.10552	.18096	.00531	.01055	.01058	.01440	.08190	3.0685
Stddev	.00013	.00063	.00228	.00108	.00031	.00009	.00231	.00279	.00003	.00010	.00008	.00044	.00167	.0012
%RSD	1.3491	.58414	14.846	.83265	3.1734	9.2883	2.1884	1.5403	.61528	.95460	.74670	3.0389	2.0397	.03868
#1	.00974	.10873	.01696	.12889	.00965	.00098	.10716	.17899	.00528	.01062	.01063	.01409	.08071	3.0677
#2	.00955	.10784	.01374	.13041	.01009	.00086	.10389	.18294	.00533	.01048	.01052	.01471	.08308	3.0693

Check ? Value Range	Chk Pass													
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Elem Units	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm
Avg	.01023	.19762	.01030	.01993	1.2940	.04080	3.0823	.00815	.08783	.00813	.01656	.40331	.86307	.10088
Stddev	.00133	.00381	.00010	.00015	.0201	.00017	.0171	.00101	.00554	.00098	.00148	.01303	.02789	.00063
%RSD	13.050	1.9280	.97882	.75726	1.5511	.41998	.55438	12.394	6.3099	12.034	8.9436	3.2315	3.2315	.62512
#1	.01117	.19493	.01023	.02004	1.2798	.04068	3.0703	.00743	.09175	.00744	.01552	.41252	.88280	.10043
#2	.00928	.20031	.01037	.01983	1.3082	.04092	3.0944	.00886	.08391	.00883	.01761	.39409	.84335	.10132

Check ? Value Range	Chk Pass	None	Chk Pass											
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Elem Units	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Ti1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00980	.01747	.01029	.01653	.05674	.01074	.01997	.01412
Stddev	.00004	.00250	.00004	.00020	.03885	.00048	.00008	.00143
%RSD	.39071	14.311	.37809	1.2239	68.471	4.4912	.40602	10.107
#1	.00977	.01570	.01032	.01638	.08422	.01040	.02003	.01311
#2	.00982	.01924	.01026	.01667	.02927	.01108	.01991	.01513

Check ? Value Range	Chk Pass							
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3166.8	56564.	6738.3
Stddev	14.0	245.	4.2
%RSD	.44101	.43288	.06270
#1	3157.0	56737.	6735.3
#2	3176.7	56391.	6741.3

Sample Name: 280-69777-A-8-A Acquired: 5/31/2015 3:52:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00346	19.627	.12947	5.1191	.65156	.00070	.00266	229.78	.02145
Stddev	.00046	.072	.00166	.0092	.00228	.00009	.00112	1.14	.00007
%RSD	13.199	.36491	1.2799	.17970	.34935	12.673	42.151	.49825	.33709
#1	.00379	19.678	.13064	5.1256	.65317	.00064	.00187	230.59	.02140
#2	.00314	19.577	.12830	5.1126	.64995	.00076	.00345	228.97	.02150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30082	W .39480	1.4350	56.086	54.888	.17332	71.946	2.6403	1.1958
Stddev	.00058	.00057	.0039	.208	.295	.00017	.154	.0084	.0039
%RSD	.19171	.14564	.27364	.37122	.53813	.09559	.21438	.31669	.32216
#1	.30123	.39521	1.4322	55.938	55.097	.17344	72.055	2.6463	1.1985
#2	.30041	.39440	1.4378	56.233	54.679	.17321	71.837	2.6344	1.1931
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 969.15	.26366	W 2.9439	.10441	F 441.38	.01052	.50006	35.492	75.952
Stddev	1.66	.00062	.0127	.00177	.90	.00169	.00275	.142	.304
%RSD	.17093	.23573	.43210	1.6984	.20285	16.104	.54970	.40058	.40058
#1	970.32	.26410	2.9529	.10566	442.01	.00933	.49812	35.592	76.168
#2	967.98	.26322	2.9349	.10316	440.75	.01172	.50200	35.391	75.737
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-.20000				
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13915	2.0218	.01071	.50064	W -.01058	W -.06362	.07227	3.6296	.02271
Stddev	.00286	.0094	.00211	.00008	.00201	.00571	.00012	.0149	.00055
%RSD	2.0535	.46498	19.742	.01660	18.989	8.9791	.16580	.41085	2.4124
#1	.14117	2.0284	.01220	.50070	-.01200	-.06765	.07236	3.6191	.02309
#2	.13713	2.0152	.00921	.50058	-.00916	-.05958	.07219	3.6402	.02232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit					5.0000	45.000			
Low Limit					-.01000	-.05000			
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2911.5	52150.	6741.8						
Stddev	3.3	310.	28.6						
%RSD	.11343	.59416	.42494						
#1	2913.9	51930.	6721.6						
#2	2909.2	52369.	6762.1						

Sample Name: 280-69777-A-9-A Acquired: 5/31/2015 3:55:26 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00085	As1890 ppm 8.2752	B_2089 ppm .05643	Ba4554 ppm 5.5877	Be3130 ppm .39511	Bi2230 ppm .00030	Ca3179 ppm -0.0123	Cd2288 ppm 245.32	
#1	.00060	8.2930	.05362	5.6121	.39487	.00031	.00083	246.05	.00191	
#2	.00110	8.2573	.05923	5.5634	.39536	.00029	-.00330	244.60	.00189	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .06980	Cu3247 ppm W .51073	Fe2714 ppm .92773	K_7664 ppm 46.987	Li6707 ppm 35.558	Mg2790 ppm .18779	Mn2576 ppm 71.629	Mo2020 ppm 1.7513	
#1	.06986	.50892	.92386	46.850	35.559	.18705	71.356	1.7492	.28602	
#2	.06975	.51254	.93160	47.124	35.556	.18853	71.901	1.7535	.28707	
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 527.63	P_1782 ppm .12183	Pb2203 ppm 1.7068	S_1820 ppm .05368	Sb2068 ppm F 580.86	Se1960 ppm .01214	Si2881 ppm .01994	SiO2 ppm 20.322	
#1	526.98	.12173	1.7135	.05519	583.63	.01497	.01914	20.236	43.305	
#2	528.29	.12194	1.7001	.05216	578.09	.00930	.02074	20.407	43.672	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .19459	Th2837 ppm 1.8001	Ti3349 ppm .00956	Tl1908 ppm .18142	U_3701 ppm -.00958	V_2924 ppm W -.07269	Zn2062 ppm .03059	Zr3391 ppm 2.5942	
#1	.19374	1.7980	.00892	.18296	-.01052	-.07454	.03033	2.6157	.01026	
#2	.19544	1.8021	.01019	.17989	-.00864	-.07083	.03086	2.5728	.00836	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2906.6	Y_3774 Cts/S 52109.	377.433 {89}				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}	
#1	2897.3	52156.	6666.9							
#2	2916.0	52062.	6677.4							

Sample Name: 280-69777-A-10-A Acquired: 5/31/2015 3:58:05 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01209	15.154	.58869	5.6026	1.3574	.00054	F.12414	242.82	.04916
Stddev	.00003	.108	.00206	.0162	.0073	.00001	.00317	.97	.00087
%RSD	.28681	.70945	.34983	.28882	.53846	2.2938	2.5549	.39814	1.7713
#1	.01207	15.078	.58723	5.6141	1.3522	.00053	.12189	242.14	.04978
#2	.01212	15.230	.59014	5.5912	1.3626	.00055	.12638	243.50	.04855
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03360	F.10548	1.0314	71.685	43.101	.13510	53.402	6.3440	.35199
Stddev	.00017	.0027	.0043	.379	.311	.00230	.092	.0165	.00029
%RSD	.49693	.26062	.41186	.52840	.72246	1.7056	.17317	.25948	.08151
#1	.03348	1.0567	1.0284	71.417	42.881	.13347	53.336	6.3323	.35219
#2	.03372	1.0528	1.0344	71.953	43.321	.13673	53.467	6.3556	.35179
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1.0000							
Low Limit		-.02000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2302.2	.24714	W 11.009	1.2789	F 593.03	.05674	.04360	26.337	56.362
Stddev	12.9	.00008	.002	.0072	2.93	.00128	.00281	.201	.431
%RSD	.56188	.03219	.01621	.56430	.49443	2.2523	6.4554	.76394	.76394
#1	2293.1	.24720	11.011	1.2738	595.11	.05584	.04161	26.195	56.058
#2	2311.4	.24708	11.008	1.2840	590.96	.05764	.04559	26.480	56.666
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-.1.0000		-.20000				
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 49.081	1.6194	.01881	.96590	-.00875	-.02783	.06733	3.2208	.04325
Stddev	.075	.0083	.00106	.00092	.00571	.01729	.00110	.0474	.00105
%RSD	.15211	.51333	5.6601	.09562	65.218	62.123	1.6324	1.4707	2.4328
#1	49.134	1.6135	.01957	.96525	-.01279	-.04005	.06655	3.1873	.04251
#2	49.028	1.6252	.01806	.96656	-.00472	-.01560	.06810	3.2543	.04399
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	20.000								
Low Limit	-.10000								
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2827.3	49797.	6593.3						
Stddev	1.1	90.	7.1						
%RSD	.03752	.18091	.10795						
#1	2826.5	49861.	6598.3						
#2	2828.0	49733.	6588.2						

Sample Name: 280-69777-A-10-ASD@5 Acquired: 5/31/2015 4:01:06 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date: Custom ID2: Custom ID3:

Comment: 279412 6010B denwaste

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 .11884	B_2089 1.2801	Ba4554 .27647	Be3130 .00018	Bi2230 .02555	Ca3179 50.281	Cd2288 .01005
#1	.00145	3.0491	.12005	1.2782	.27589	.00013	.02542	50.210	.01035
#2	.00230	3.1183	.11763	1.2819	.27704	.00024	.02568	50.352	.00976
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00710	.24885	.21935	14.095	8.7791	.03030	11.943	1.3473	.07306
#2	.00675	.24500	.21759	14.126	8.7757	.03052	11.938	1.3491	.07362
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	465.37	.05676	2.2332	.28900	122.55	.01205	.01207	5.3292	11.404
#2	465.78	.05625	2.2044	.28686	123.17	.00932	.01113	5.3451	11.438
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	11.165	.32790	.00653	.21014	-.00366	-.03580	.01328	.69342	.01064
#2	11.163	.32904	.00614	.20921	-.00953	-.02242	.01367	.68684	.01037
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3015.6	53402.	6724.7						
#2	3018.1	53400.	6696.1						

Sample Name: CCVH-3294468 Acquired: 5/31/2015 4:03:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	-0.00718	45.106	-0.00165	.02299	.000086	.00008	1.0323	.03955	.00001	-.00036	.00074	-.00136
Stddev	.00024	.078	.00551	.00095	.00024	.00000	.0015	.00249	.00008	.00012	.00015	.00018
%RSD	3.3860	.17283	333.49	4.1130	28.311	.87454	.15059	6.2972	1044.1	34.140	20.504	13.499
#1	-.00700	45.161	-.00555	.02365	.00069	.00008	1.0334	.03779	.00007	-.00044	.00063	-.00149
#2	-.00735	45.051	.00224	.02232	.00103	.00008	1.0312	.04132	-.00005	-.00027	.00085	-.00123

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	F 39.453	.16458	.00248	.05364	-.00137	-.00060	251.29	.00213	.00821	-.00013	5.1525	-.01170
Stddev	.121	.02841	.00097	.00648	.00003	.00016	1.21	.00016	.00229	.00042	.0360	.00197
%RSD	.30559	17.259	39.317	12.079	2.5313	26.440	.48222	7.3366	27.912	313.63	.69855	16.858
#1	39.368	.18467	.00317	.05822	-.00134	-.00049	250.44	.00202	.00659	.00016	5.1780	-.01310
#2	39.538	.14450	.00179	.04906	-.00139	-.00071	252.15	.00224	.00984	-.00043	5.1271	-.01031

Check ? Value Range	Chk Fail 50.000	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
	-10.490%											

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00667	-.04003	-.08567	-.00034	.00040	4.8314	-.01147	.00174	10.350	.00375	-.00077	-.13228
Stddev	.00240	.01227	.02625	.00058	.00002	.0220	.00026	.00008	.091	.00023	.00062	.00094
%RSD	36.012	30.643	30.643	170.17	4.5188	.45467	2.2537	4.4521	.88021	6.0318	79.950	.70870
#1	.00497	-.03136	-.06711	-.00075	.00038	4.8158	-.01129	.00169	10.285	.00359	-.00033	-.13294
#2	.00837	-.04871	-.10424	.00007	.00041	4.8469	-.01165	.00180	10.414	.00391	-.00121	-.13162

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3084.1	54511.	6550.0
Stddev	2.9	65.	37.9
%RSD	.09471	.11996	.57885
#1	3086.2	54464.	6576.8
#2	3082.1	54557.	6523.1

Sample Name: CCV-3296664 Acquired: 5/31/2015 4:06:26 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.48551	.52156	1.0066	.54330	.48526	F .44320	-0.00022	F 4.3972	.51209	.50118	.52030	.49774
Stddev	.00291	.00257	.0032	.00083	.00023	.00036	.00010	.0307	.00256	.00089	.00145	.00077
%RSD	.59937	.49349	.32199	.15251	.04680	.08122	46.827	.69861	.49908	.17710	.27775	.15389
#1	.48345	.51974	1.0043	.54388	.48542	.44346	-0.0029	4.3755	.51390	.50055	.51928	.49720
#2	.48757	.52338	1.0089	.54271	.48510	.44295	-0.0014	4.4189	.51029	.50180	.52133	.49829
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 -10.490%	None 5.0000 -10.490%	Chk Fail 5.0000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	F 2.0544	49.710	1.0112	18.875	.49295	.49271	5.3856	.49451	1.0500	.98117	.10116	1.0390
Stddev	.0117	.011	.0010	.079	.00197	.00113	.0077	.00128	.0053	.00086	.00319	.0012
%RSD	.57070	.02119	.10037	.41977	.39986	.22998	.14218	.25831	.50299	.08775	3.1492	.11161
#1	2.0462	49.703	1.0120	18.819	.49156	.49191	5.3910	.49361	1.0463	.98056	.10341	1.0382
#2	2.0627	49.718	1.0105	18.931	.49434	.49351	5.3802	.49542	1.0538	.98178	.09891	1.0398
Check ? Value Range	Chk Fail 2.5000 -10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.0048	F 4.2139	F 9.0178	.99027	.47981	.00175	.49478	1.0122	-.02547	.50447	.46828	.45408
Stddev	.0007	.0965	.2065	.00053	.00015	.00351	.00163	.0047	.00568	.00275	.00107	.00700
%RSD	.06646	2.2904	2.2904	.05335	.03054	200.22	.32980	.46730	22.293	.54436	.22773	1.5406
#1	1.0053	4.1457	8.8717	.98990	.47991	.00424	4.9362	1.0089	-.02948	.50253	.46753	.44914
#2	1.0044	4.2821	9.1638	.99064	.47971	-.00073	.49593	1.0155	-.02145	.50641	.46904	.45903
Check ? Value Range	Chk Pass	Chk Fail 5.0000 -10.490%	Chk Fail 10.700 -10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3128.6	55262.	6613.0									
Stddev	1.6	199.	31.2									
%RSD	.04960	.35977	.47204									
#1	3127.5	55402.	6635.1									
#2	3129.7	55121.	6590.9									

Sample Name: CCB Acquired: 5/31/2015 4:08:54 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: broanderl Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00053	Al1670 ppm .00036	As1890 ppm .00059	B_2089 ppm .01759	Ba4554 ppm .00004	Be3130 ppm .00007	Bi2230 ppm .00192	Ca3179 ppm .00309	Cd2288 ppm -.00011	Co2286 ppm .00006	Cr2055 ppm .00016	Cu3247 ppm -.00130	Fe2599 ppm -.00040
#1	-.00019	.00053	-.00407	.01799	.00009	.00009	.00100	.00278	-.00012	-.00001	.00033	-.00120	-.00076
#2	-.00087	.00018	.00526	.01719	.00000	.00006	.00283	.00341	-.00009	.00014	.00000	-.00141	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .10525	Li6707 ppm .00037	Mg2790 ppm -.00100	Mn2576 ppm .00005	Mo2020 ppm .00058	Na5895 ppm .33528	Ni2316 ppm -.00008	P_1782 ppm .00191	Pb2203 ppm .00019	S_1820 ppm .08333	Sb2068 ppm -.00072	Se1960 ppm .00091	Si2881 ppm -.03309
#1	.11985	-.00020	-.00234	.00008	.00038	.33241	-.00026	.00126	-.00079	.08432	-.00467	-.00132	-.03354
#2	.09064	.00094	.00034	.00003	.00078	.33814	.00010	.00255	.00116	.08235	.00323	.00315	-.03263
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm -.07081	Sn1899 ppm .00047	Sr4077 ppm .00017	Th2837 ppm .00192	Ti3349 ppm .00053	TI1908 ppm .00021	U_3701 ppm -.01008	V_2924 ppm .00030	Zn2062 ppm .00014	Zr3391 ppm .00212			
#1	-.07177	.00066	.00019	.00035	.00053	-.00029	.00519	.00059	.00009	.00109			
#2	-.06984	.00027	.00016	.00349	.00053	.00072	-.02535	.00002	.00020	.00314			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3158.7	Y_3600 Cts/S 56245.	Y_3774 Cts/S 6527.6										
#1	3165.0	56322.	6510.3										
#2	3152.4	56167.	6544.9										

Sample Name: CCVL3301032 Acquired: 5/31/2015 4:11:17 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00965	.11077	.01425	.12161	.01019	.00097	.10504	.18833	.00513	.01059	.01080	.01445
Stddev	.00056	.00014	.00099	.00106	.00009	.00002	.00099	.00227	.00019	.00006	.00004	.00020
%RSD	5.8076	.12710	6.9561	.87316	.88991	2.1290	.94625	1.2048	3.7814	.58272	.35543	1.4161
#1	.00925	.11087	.01496	.12236	.01026	.00096	.10574	.18672	.00526	.01055	.01077	.01431
#2	.01005	.11067	.01355	.12086	.01013	.00099	.10433	.18993	.00499	.01063	.01082	.01460

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08651	3.1699	.01055	.20563	.01052	.01963	F 1.3348	.04073	3.0655	.00777	.08360	F .00686
Stddev	.00066	.0295	.00072	.00603	.00006	.00020	.0013	.00052	.0152	.00083	.00584	.00037
%RSD	.76216	.93180	6.8716	2.9333	.52834	.99495	.09472	1.2851	.49479	10.688	6.9870	5.3411
#1	.08605	3.1490	.01106	.20136	.01048	.01977	1.3339	.04110	3.0762	.00835	.08773	.00660
#2	.08698	3.1908	.01003	.20989	.01056	.01950	1.3357	.04036	3.0548	.00718	.07947	.00712

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.0000	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .01000
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm

Avg	.01640	.40679	.87053	.10278	.01008	.01855	.01030	.01447	.04340	.01020	.02091	.01386
Stddev	.00092	.00052	.00111	.00103	.00017	.00027	.00002	.00181	.01538	.00007	.00027	.00030
%RSD	5.5866	.12742	.12742	.99897	1.6632	1.4383	.17225	12.531	35.435	.72538	1.2820	2.1404
#1	.01705	.40642	.86974	.10206	.00996	.01874	.01031	.01576	.03253	.01025	.02072	.01407
#2	.01575	.40716	.87131	.10351	.01019	.01836	.01028	.01319	.05427	.01014	.02110	.01365

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3153.3	55592.	6534.8									
Stddev	1.7	249.	65.9									
%RSD	.05383	.44751	1.0078									
#1	3154.5	55768.	6488.2									
#2	3152.1	55416.	6581.3									

Sample Name: CCVL3301032II Acquired: 5/31/2015 4:11:17 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: broanderl Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00965	.11077	.01425	.12161	.01019	.00097	.10504	.18833	.00513	.01059	.01080	.01445
Stddev	.00056	.00014	.00099	.00106	.00009	.00002	.00099	.00227	.00019	.00006	.00004	.00020
%RSD	5.8076	.12710	6.9561	.87316	.88991	2.1290	.94625	1.2048	3.7814	.58272	.35543	1.4161
#1	.00925	.11087	.01496	.12236	.01026	.00096	.10574	.18672	.00526	.01055	.01077	.01431
#2	.01005	.11067	.01355	.12086	.01013	.00099	.10433	.18993	.00499	.01063	.01082	.01460

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.08651	3.1699	.01055	.20563	.01052	.01963	F 1.3348	.04073	3.0655	.00777	.08360	F .00686
Stddev	.00066	.0295	.00072	.00603	.00006	.00020	.0013	.00052	.0152	.00083	.00584	.00037
%RSD	.76216	.93180	6.8716	2.9333	.52834	.99495	.09472	1.2851	.49479	10.688	6.9870	5.3411
#1	.08605	3.1490	.01106	.20136	.01048	.01977	1.3339	.04110	3.0762	.00835	.08773	.00660
#2	.08698	3.1908	.01003	.20989	.01056	.01950	1.3357	.04036	3.0548	.00718	.07947	.00712

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.0000	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .01000
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm

Avg	.01640	.40679	.87053	.10278	.01008	.01855	.01030	.01447	.04340	.01020	.02091	.01386
Stddev	.00092	.00052	.00111	.00103	.00017	.00027	.00002	.00181	.01538	.00007	.00027	.00030
%RSD	5.5866	.12742	.12742	.99897	1.6632	1.4383	.17225	12.531	35.435	.72538	1.2820	2.1404
#1	.01705	.40642	.86974	.10206	.00996	.01874	.01031	.01576	.03253	.01025	.02072	.01407
#2	.01575	.40716	.87131	.10351	.01019	.01836	.01028	.01319	.05427	.01014	.02110	.01365

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3153.3	55592.	6534.8									
Stddev	1.7	249.	65.9									
%RSD	.05383	.44751	1.0078									
#1	3154.5	55768.	6488.2									
#2	3152.1	55416.	6581.3									

ICP Data Review Checklist 279694, 279695, 279698

TALS BATCH NUMBER: 279689, 279691, 279692		Earliest due date: 6/2/15		
Run Date: 5/30/15	Analyst: Laura Branner	Instrument: MT-25		
QC programs/Methods Run: 6010C, 200.7, 6010B, SAR				
Review Items	Yes	No	N/A	2nd Level
A. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	/			/
2. Method blank done per prep batch and < 1/2 RL or CRDL (CLP) or < 2.2x MDL 200.7?	/			/
3. MS run at required frequency and within limits?	/			/
4. MSD or DU run at required frequency and RPD within SOP limits?	/			/
5. Serial dilution done per prep batch (or per SDG for CLP)?	/			/
6. Post digest spike analyzed if required (CLP, DOD & AFCEE only)? NCM Whether needed for DODV3, DODV4, DODV5, AFCEE 4.0, 6010C?	/			/
B. Calibration/Instrument Run QC				
1. ICV/CCV analyzed at appropriate frequency and within control limits? (6010B: CLP = 90 - 110%; 200.7: ICV = 95 - 105%, CCV 90-110%) If not in control, was the ICV or CCV reanalyzed twice to show return to control as per NELAP?	/			/
2. ICB/CCB analyzed at appropriate frequency and < 1/2 RL or < 2X MDL (DOD V3, AFCEE 4.0)? Was it less than the LODV (DODV4 & DODV5)	/			/
3. High Standard (HIGH) reanalyzed before samples and recovered within QC limits? (+-5%)	/			/
4. RL STD run and recovered within QC limits? (\pm 50% for non-CLP, \pm 20% for DoD V3 / DoD V4 / DoD V5 / AFCEE 4.0 / USACE)	/			/
5. Was the LLICV/LLCCV analyzed at appropriate frequency for 6010C and within control (+- 30 % or +-20%)	/			/
6. ICSA/ICSAB run at required frequency and within SOP limits? (ICSA < 2X MDL AFCEE 4.0, DOD V3 or < RL std work or < 2X RL 6010C, DOD V4, DOD V5)	/			/
C. Sample Results				
1. For 6010B, were samples with concentrations > the linear range for any parameter diluted and reanalyzed? For 200.7, were samples with concentrations within 90% of the linear range diluted and reanalyzed?	/			/
2. For DOD, were samples with concentrations > the daily linear range for any parameter diluted and reanalyzed?	/			/
3. Are all reported results bracketed by in control QC?	/			/
D. Other				
1. Are all nonconformances documented appropriately?	/			/
2. Calculations checked for errors?	/			/
3. Transcriptions checked for errors? (Example: Are dilution factors that are entered into the sequence log correct?)	/			/
4. All client/project specific requirements met?	/			/
5. Date/time of analysis verified as correct?	/			/
6. PDF attached, verified uncorrupted?	/			/

Analyst: Laura BrannerDate: 6/1/15

Comments: _____

2nd Level Reviewer: SJDate: 6/2/15

Comments: _____

Sample Name: ICIS Acquired: 6/1/2015 10:41:45 Type: Cal
 Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00124	.00068	-.00313	-.00019	.00152	.00042	-.00946	-.00202	.00422	.00002	-.00058	-.37234
Stddev	.00003	.00003	.00010	.00001	.00005	.00049	.00046	.00048	.00006	.00039	.00009	.13091
%RSD	2.7514	4.1867	3.2644	4.1394	3.1703	115.28	4.8666	23.960	1.3973	1819.2	16.316	35.158
#1	-.00122	.00066	-.00306	-.00020	.00148	.00077	-.00913	-.00168	.00417	-.00026	-.00052	-.46491
#2	-.00127	.00070	-.00320	-.00019	.00155	.00008	-.00978	-.00236	.00426	.00030	-.00065	-.27978
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00216	.00189	.00027	-.00040	-.00513	.00008	.00009	-.00004	.00393	-.00935	-.00143	.00024
Stddev	.00000	.00024	.00015	.00080	.00036	.00002	.00003	.00016	.00121	.00140	.00010	.00001
%RSD	.10748	12.747	55.745	199.10	7.0510	30.309	28.310	461.14	30.720	14.971	6.7625	5.7707
#1	.00216	.00172	.00037	-.00097	-.00539	.00010	.00007	-.00015	.00478	-.00836	-.00150	.00023
#2	.00217	.00206	.00016	.00016	-.00487	.00006	.00011	.00008	.00307	-.01034	-.00137	.00024
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00088	-.00036	.00051	.00057	.00145	.00145	.00015	-.00430	.00006	-.00014	-.00030	-.00011
Stddev	.00002	.00004	.00035	.00004	.00025	.00025	.00024	.00060	.00005	.00002	.00011	.00003
%RSD	2.0286	11.099	69.405	6.4106	17.037	17.037	159.99	13.946	73.652	14.417	36.056	27.272
#1	-.00087	-.00033	.00026	.00059	.00162	.00162	.00032	-.00472	.00003	-.00013	-.00023	-.00009
#2	-.00089	-.00039	.00076	.00054	.00128	.00128	-.00002	-.00387	.00010	-.00015	-.00038	-.00013
Elem	V_2924	Zn2062	Zr3391									
Units	Cts/S	Cts/S	Cts/S									
Avg	-.00088	.00002	-.00254									
Stddev	.00008	.00001	.00044									
%RSD	9.2482	26.374	17.149									
#1	-.00082	.00002	-.00285									
#2	-.00093	.00003	-.00223									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	3660.8	63279.	8385.9									
Stddev	2.1	95.	63.7									
%RSD	.05644	.15049	.75996									
#1	3659.4	63346.	8431.0									
#2	3662.3	63212.	8340.9									

Sample Name: ICAL1 Acquired: 6/1/2015 10:44:08 Type: Cal
 Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.20016	.22355	.08779	.28948	4.7155	6.6520	1.6532	1.7954	.87458	3112.0	.30467	.73992	3.3679
Stddev	.00030	.00044	.00026	.00029	.0001	.0028	.0010	.0055	.00048	6.3	.00132	.00238	.0050
%RSD	.14903	.19769	.29977	.09959	.00116	.04277	.05763	.30621	.05516	.20092	.43443	.32216	.14849
#1	.19995	.22324	.08798	.28968	4.7154	6.6540	1.6525	1.7993	.87492	3116.4	.30374	.73824	3.3715
#2	.20038	.22386	.08760	.28928	4.7155	6.6499	1.6539	1.7915	.87424	3107.6	.30561	.74161	3.3644
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.0455	.69315	1.0015	.45517	1.4585	.67818	.10018	.44954	.19735	.08235	.26150	.26150	.20747
Stddev	.0032	.00181	.0017	.00033	.0029	.00029	.00027	.00129	.00162	.00043	.00153	.00153	.00010
%RSD	.15396	.26171	.16445	.07229	.20081	.04261	.27017	.28655	.82112	.52788	.58632	.58632	.04696
#1	2.0477	.69187	1.0027	.45541	1.4606	.67797	.10038	.45045	.19849	.08266	.26041	.26041	.20754
#2	2.0433	.69444	1.0003	.45494	1.4565	.67838	.09999	.44863	.19620	.08204	.26258	.26258	.20741
Elem	Sr4077	Ti3349	TI1908	V_2924	Zn2062	Zr3391							
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S							
Avg	9.3970	.27753	.16944	.16817	.01836	.32738							
Stddev	.0083	.00041	.00034	.00039	.00008	.00092							
%RSD	.08787	.14827	.19852	.23216	.41141	.28013							
#1	9.4028	.27782	.16920	.16845	.01842	.32673							
#2	9.3911	.27723	.16968	.16789	.01831	.32803							
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3465.8	59097.	7587.1										
Stddev	10.9	108.	4.2										
%RSD	.31325	.18208	.05587										
#1	3473.5	59173.	7590.1										
#2	3458.1	59021.	7584.1										

Sample Name: ICAL2 Acquired: 6/1/2015 10:46:34 Type: Cal
Method: 6500_025(v16) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.0754	.31419	.67373	2.1590	.27917	.45856	.12199
Stddev	.0010	.00381	.00030	.0034	.00356	.00036	.00041
%RSD	.03185	1.2123	.04398	.15627	1.2756	.07773	.33793
#1	3.0747	.31689	.67352	2.1614	.28168	.45881	.12229
#2	3.0761	.31150	.67394	2.1566	.27665	.45831	.12170
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	3289.2	55352.	7045.5				
Stddev	5.1	3.	17.1				
%RSD	.15523	.00483	.24286				
#1	3285.6	55354.	7033.4				
#2	3292.8	55350.	7057.6				

Sample Name: s1-3296663 Acquired: 6/1/2015 10:49:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	1.0233	1.0238	2.0083	1.0174	.99337	1.0030	-.00070	10.061	1.0200	1.0048	.97406	1.0108	5.0779
Stddev	.0037	.0042	.0108	.0076	.00144	.0038	.00019	.047	.0032	.0026	.00007	.0057	.0469
%RSD	.35720	.40751	.53705	.74251	.14521	.37675	27.843	.46579	.31674	.25884	.00697	.56327	.92255
#1	1.0207	1.0268	2.0159	1.0227	.99235	1.0003	-.00084	10.028	1.0223	1.0067	.97401	1.0067	5.0448
#2	1.0259	1.0209	2.0007	1.0120	.99439	1.0057	-.00056	10.094	1.0177	1.0030	.97411	1.0148	5.1111

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	100.53	2.0051	40.828	1.0159	1.0005	10.114	1.0065	2.0339	2.0152	-.01100	2.0247	2.0140	10.272
Stddev	.10	.0007	.163	.0001	.0139	.001	.0012	.0295	.0294	.00319	.0313	.0371	.285
%RSD	.10204	.03396	.39868	.01220	1.3903	.00680	.12261	1.4499	1.4611	28.974	1.5466	1.8434	2.7779
#1	100.61	2.0055	40.713	1.0160	1.0104	10.114	1.0074	2.0547	2.0360	-.01326	2.0469	2.0403	10.070
#2	100.46	2.0046	40.944	1.0158	.99070	10.113	1.0056	2.0130	1.9944	-.00875	2.0026	1.9878	10.474

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	21.982	2.0164	.99814	-.00830	1.0107	2.0274	-.03090	1.0154	1.0251	1.0119
Stddev	.611	.0273	.00188	.00039	.0001	.0311	.02421	.0022	.0006	.0222
%RSD	2.7779	1.3556	.18832	4.7211	.00847	1.5314	78.356	.22060	.05697	2.1969
#1	21.550	2.0357	.99681	-.00857	1.0108	2.0493	-.04802	1.0138	1.0255	.99620
#2	22.414	1.9970	.99947	-.00802	1.0107	2.0054	-.01378	1.0170	1.0246	1.0276

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	3348.2	56483.	7148.0							
Stddev	1.9	118.	55.9							
%RSD	.05691	.20895	.78228							
#1	3346.9	56399.	7187.5							
#2	3349.6	56566.	7108.5							

Sample Name: s2-3294467 Acquired: 6/1/2015 10:51:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00610	100.67	-.00215	.00131	.00139	.00008	1.9923	.06520	.00014	-.00026	.00085	-.00172	100.41
Stddev	.00009	.20	.00258	.00054	.00001	.00002	.0108	.00058	.00021	.00021	.00002	.00029	.07
%RSD	1.4793	.20116	120.06	41.309	.49297	29.685	.54431	.89383	144.91	82.174	2.6272	16.917	.07365
#1	.00604	100.53	-.00398	.00170	.00139	.00007	1.9846	.06478	.00000	-.00041	.00084	-.00192	100.36
#2	.00617	100.82	-.00033	.00093	.00140	.00010	2.0000	.06561	.00029	-.00011	.00087	-.00151	100.46
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.33064	.00843	.10349	-.00302	-.00039	496.16	.00517	.00196	.00359	10.062	-.01675	.01079	-.02189
Stddev	.06166	.00050	.00127	.00001	.00014	.72	.00059	.00029	.00318	.112	.00176	.00219	.02245
%RSD	18.648	5.9152	1.2242	.25573	35.522	.14474	11.319	14.581	88.740	1.1156	10.526	20.308	102.59
#1	.28704	.00879	.10439	-.00301	-.00048	495.65	.00476	.00216	.00583	9.9830	-.01800	.00924	-.00601
#2	.37424	.00808	.10259	-.00302	-.00029	496.67	.00558	.00176	.00134	10.142	-.01550	.01233	-.03777
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	-.04684	-.00632	.00079	9.9677	-.02477	.00360	20.034	.00403	.00009	-.25528			
Stddev	.04805	.00128	.00014	.0164	.00002	.00029	.006	.00034	.00038	.00086			
%RSD	102.59	20.289	18.110	.16415	.06803	8.1433	.02951	8.5176	445.14	.33570			
#1	-.01286	-.00722	.00069	9.9561	-.02476	.00339	20.030	.00428	-.00019	-.25589			
#2	-.08082	-.00541	.00089	9.9792	-.02478	.00380	20.038	.00379	.00036	-.25467			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None			
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3246.4	54492.	7057.3										
Stddev	19.7	29.	27.3										
%RSD	.60632	.05332	.38674										
#1	3260.3	54513.	7076.6										
#2	3232.5	54472.	7038.0										

Sample Name: ICVH-3300139 Acquired: 6/1/2015 10:54:48 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00189	39.707	-00396	-00082	.00079	-00010	.49240	.01615	.00019	.00029	.00076
Stddev	.00043	.090	.00107	.00011	.00011	.00002	.00314	.00349	.00008	.00019	.00018
%RSD	22.998	.22647	27.030	13.856	14.299	19.372	.63725	21.617	42.021	62.871	23.145
#1	.00158	39.770	-.00472	-.00074	.00087	-.00009	.49018	.01862	.00014	.00016	.00063
#2	.00220	39.643	-.00321	-.00090	.00071	-.00011	.49462	.01368	.00025	.00043	.00088
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	77.157	.16472	.00413	.02484	.00025	-.00104	39.891	.00281	-.00773	.00159
Stddev	.00010	1.240	.02840	.00024	.00254	.00000	.00024	.755	.00003	.00089	.00152
%RSD	72.936	1.6070	17.244	5.7107	10.224	1.7573	23.252	1.8927	1.2198	11.528	95.487
#1	.00007	78.034	.14463	.00396	.02664	-.00025	-.00122	40.425	.00284	-.00710	.00052
#2	.00020	76.281	.18480	.00430	.02304	-.00025	-.00087	39.358	.00279	-.00836	.00266
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3.6482	-.00802	-.00281	-.01090	-.02332	-.00350	.00020	2.8638	-.00808	.00141	4.9459
Stddev	.0072	.00061	.00515	.01090	.02333	.00001	.00017	.0027	.00017	.00105	.0537
%RSD	.19703	7.6331	183.59	100.04	100.04	.32175	82.711	.09556	2.0829	74.606	1.0854
#1	3.6431	-.00759	.00084	-.01861	-.03982	-.00350	.00032	2.8618	-.00820	.00215	4.9838
#2	3.6532	-.00846	-.00645	-.00319	-.00682	-.00351	.00008	2.8657	-.00796	.00066	4.9079
Check ?	Chk Warn	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value Range	4.0000 -5.4900%										
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00149	-.00085	-.07644								
Stddev	.00028	.00075	.00097								
%RSD	18.551	89.118	1.2645								
#1	.00169	-.00031	-.07576								
#2	.00130	-.00138	-.07713								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3393.3	57371.	7005.8								
Stddev	2.4	194.	58.9								
%RSD	.07055	.33841	.84085								
#1	3391.6	57509.	6964.1								
#2	3395.0	57234.	7047.5								

Sample Name: ICV-3289337 Acquired: 6/1/2015 10:57:39 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .24434	Al1670 ppm .26186	As1890 ppm .23819	B_2089 ppm .24118	Ba4554 ppm .23847	Be3130 ppm .23834	Bi2230 ppm -.00032	Ca3179 ppm 1.9767	Cd2288 ppm .24839	Co2286 ppm .25046	Cr2055 ppm .24165
#1	.24381	.26290	.23897	.24428	.23867	.23841	-.00192	1.9629	.25093	.25241	.24376
#2	.24486	.26082	.23742	.23809	.23826	.23828	.00128	1.9906	.24584	.24850	.23955
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .24374	Fe2599 ppm .25428	K_7664 ppm 19.481	Li6707 ppm .25091	Mg2790 ppm 9.9909	Mn2576 ppm .24876	Mo2020 ppm .24410	Na5895 ppm 1.9617	Ni2316 ppm .25054	P_1782 ppm 1.9582	Pb2203 ppm .25129
#1	.24375	.25372	19.423	.24985	9.9888	.24775	.24612	1.9556	.25273	1.9794	.25408
#2	.24372	.25484	19.539	.25196	9.9930	.24976	.24208	1.9679	.24835	1.9369	.24850
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm -.01872	Sb2068 ppm .24465	Se1960 ppm W .47251	Si2881 ppm 2.0009	SiO2 ppm 4.2820	Sn1899 ppm .50467	Sr4077 ppm .23924	Th2837 ppm -.00351	Ti3349 ppm .24882	Tl1908 ppm .50794	U_3701 ppm .00686
#1	-0.01476	.24830	47830	1.9782	4.2334	.51093	.23966	-.00329	.24764	.51359	.00278
#2	-.02268	.24100	.46672	2.0237	4.3306	.49841	.23882	-.00373	.25000	.50228	.01095
Check ? Value Range	None	Chk Pass	Chk Warn 50000 -5.4900%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm .24618	Zn2062 ppm .25091	Zr3391 ppm .24113								
#1	.24533	.24899	.24063								
#2	.24702	.25284	.24162								
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3389.2	Y_3600 Cts/S 57273.	Y_3774 Cts/S 7109.2								
#1	3386.7	57377.	7120.9								
#2	3391.6	57170.	7097.5								

Sample Name: ICVL-3302200 Acquired: 6/1/2015 11:00:30 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00969	.10600	.01535	.09701	.01052	.00096	.10306	.21521	.00505	.01057	.01030	.01621
Stddev	.00057	.00001	.00181	.00106	.00006	.00004	.00164	.00394	.00005	.00020	.00023	.00013
%RSD	5.9174	.00645	11.810	1.0952	.59492	4.1685	1.5909	1.8290	1.0846	1.8637	2.2328	.82606
#1	.01010	.10600	.01663	.09626	.01047	.00093	.10190	.21243	.00501	.01043	.01046	.01631
#2	.00928	.10599	.01407	.09776	.01056	.00099	.10422	.21800	.00509	.01071	.01014	.01612

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10289	3.2146	F.01481	.21969	.01068	.01895	1.0149	.04233	2.8286	.00858	-.01915	.00764
Stddev	.00142	.0302	.00235	.00217	.00017	.00025	.0019	.00042	.0111	.00122	.00188	.00090
%RSD	1.3829	.93802	15.881	.98911	1.5469	1.3059	.18657	.99975	.39362	14.171	9.8278	11.789
#1	.10189	3.2359	.01647	.21815	.01080	.01877	1.0163	.04203	2.8207	.00944	-.02048	.00700
#2	.10390	3.1933	.01315	.22123	.01056	.01912	1.0136	.04263	2.8365	.00772	-.01782	.00827

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00986	.50696	1.0849	.09877	.01019	.01255	.00963	.01771	.05308	.00940	.02330	.01112
Stddev	.00359	.00639	.0137	.00244	.00005	.00027	.00001	.00193	.02072	.00054	.00000	.00002
%RSD	36.405	1.2613	1.2613	2.4656	.50451	2.1274	.15389	10.909	39.038	5.7850	.00602	.19258
#1	.01239	.50244	1.0752	.09704	.01023	.01274	.00962	.01634	.03842	.00902	.02330	.01113
#2	.00732	.51148	1.0946	.10049	.01016	.01236	.00964	.01907	.06773	.00979	.02330	.01110

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3461.9	57896.	7101.6									
Stddev	2.5	60.	21.1									
%RSD	.07349	.10442	.29706									
#1	3460.1	57939.	7086.7									
#2	3463.7	57854.	7116.5									

Sample Name: CCVH-3294468 Acquired: 6/1/2015 11:03:20 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00283	48.675	-00181	-00075	.00064	.00002	1.00000	.03165	-00014	-00042	.00076	.00050
Stddev	.00016	.282	.00572	.00097	.00035	.00004	.00160	.00082	.00017	.00006	.00007	.00013
%RSD	5.4989	.58018	315.21	129.34	55.503	157.75	.15968	2.5947	118.17	14.912	8.8450	26.279
#1	.00294	48.475	-.00586	-.00144	.00089	.00000	.99887	.03107	-.00026	-.00038	.00071	.00041
#2	.00272	48.874	.00223	-.00006	.00039	.00005	1.0011	.03223	-.00002	-.00047	.00080	.00059

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
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Elem Units	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	48.696	.14025	.00197	.05433	-.00150	-.00087	242.29	.00230	-.00221	.00071	4.8622	-.00966
Stddev	.437	.01114	.00094	.00032	.00008	.00028	.06	.00030	.00327	.00083	.0296	.00145
%RSD	.89826	7.9416	47.691	.58689	5.5825	32.501	.02650	13.190	147.92	116.89	.60932	15.027
#1	48.387	.14813	.00130	.05456	-.00156	-.00067	242.34	.00209	-.00452	.00130	4.8413	-.00863
#2	49.005	.13238	.00263	.05411	-.00144	-.00107	242.25	.00251	-.00010	.00012	4.8832	-.01068

Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.00028	-.00612	-.01309	-.00348	.00043	4.8674	-.01238	.00429	10.235	.00198	-.00045	-.12722
Stddev	.00120	.00298	.00638	.00135	.00006	.0132	.00043	.00227	.054	.00087	.00010	.00059
%RSD	431.00	48.717	48.717	38.844	13.336	.27122	3.5034	53.037	.52771	44.098	22.101	.46197
#1	-.00057	-.00401	-.00858	-.00253	.00039	4.8767	-.01268	.00590	10.274	.00260	-.00038	-.12763
#2	.00113	-.00822	-.01760	-.00444	.00047	4.8581	-.01207	.00268	10.197	.00136	-.00052	-.12680

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3289.2	55716.	7160.5
Stddev	4.8	316.	78.6
%RSD	.14578	.56639	1.0979
#1	3292.6	55493.	7216.1
#2	3285.9	55939.	7104.9

Sample Name: CCV-3296664 Acquired: 6/1/2015 11:06:02 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50380	.52011	.98383	.49538	.48917	.49215	.00032	5.0650	.49783	.51982	.49249	.49686	2.5152
Stddev	.00293	.00261	.00436	.00209	.00318	.00174	.00154	.0153	.00076	.00300	.00024	.00326	.0050
%RSD	.58207	.50178	.44267	.42110	.64981	.35337	484.38	.30224	.15278	.57779	.04949	.65539	.19959
#1	.50172	.52195	.98691	.49685	.48692	.49092	-.00077	5.0542	.49837	.52194	.49266	.49456	2.5117
#2	.50587	.51826	.98075	.49390	.49141	.49338	.00141	5.0758	.49729	.51769	.49232	.49917	2.5188

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.712	.99264	20.266	.50791	.50077	5.0207	.51936	.98951	1.0075	-.01840	.98306	.96949	5.1066
Stddev	.218	.00595	.026	.00021	.00112	.0012	.00306	.00006	.0055	.00134	.00575	.00621	.0149
%RSD	.43856	.59938	.12677	.04063	.22315	.02452	.59012	.00601	.55032	7.3099	.58488	.64044	.29228
#1	49.558	.98843	20.248	.50805	.50156	5.0199	.52153	.98946	1.0114	-.01935	.98713	.97388	5.1172
#2	49.866	.99684	20.284	.50776	.49998	5.0216	.51720	.98955	1.0036	-.01744	.97899	.96510	5.0961

Check ? Value Range	Chk Pass												
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Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	10.928	1.0100	.49027	-.00492	.49854	1.0239	-.03747	.50341	.52254	.50250			
Stddev	.032	.0063	.00198	.00113	.00100	.0055	.03533	.00422	.00157	.00119			
%RSD	.29228	.62045	.40363	23.068	.20019	.53748	94.280	.83791	.30083	.23606			
#1	10.951	1.0144	.48887	-.00411	.49925	1.0278	-.06245	.50043	.52365	.50166			
#2	10.906	1.0056	.49167	-.00572	.49784	1.0200	-.01249	.50639	.52143	.50334			

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
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Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3309.2	55080.	6859.3										
Stddev	16.1	80.	23.5										
%RSD	.48614	.14613	.34302										
#1	3297.8	55023.	6842.7										
#2	3320.6	55137.	6876.0										

Sample Name: ICB Acquired: 6/1/2015 11:08:32 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00048	-0.00040	-0.00139	-0.00071	.00007	-0.00003	-0.00140	.00294	.00016	.00024	.00000
Stddev	.00003	.00032	.00234	.00006	.00005	.00009	.00029	.00309	.00027	.00011	.0001
%RSD	6.4034	78.680	168.24	8.8934	74.456	304.96	20.541	105.24	170.68	45.467	4769.8
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00152	.00095	.09364	.00055	.00491	.00009	.00006	.01163	.00036	.00731	.00082
Stddev	.00013	.00006	.00973	.00059	.00299	.00010	.00019	.00404	.00029	.00295	.00183
%RSD	8.5380	5.9003	10.395	107.48	60.884	104.71	305.25	34.766	82.084	40.339	224.79
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01823	-0.00100	F -0.00514	.01477	.03161	-0.00255	.00004	.00190	.00035	.00104	.01105
Stddev	.00344	.00105	.00476	.01229	.02631	.00030	.00002	.00064	.00022	.00075	.01415
%RSD	18.887	104.39	92.509	83.211	83.211	11.631	61.367	33.905	63.855	72.346	128.02
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-0.0034	-0.00093	-0.00337								
Stddev	.00001	.00081	.00071								
%RSD	3.1820	87.572	20.941								
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3367.7	56422.	6878.9								
Stddev	.4	92.	21.0								
%RSD	.01046	.16355	.30533								
#1											
#2											

Sample Name: CRI-3302204 Acquired: 6/1/2015 11:11:23 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .01097	Al1670 ppm .10457	As1890 ppm .00921	B_2089 ppm .09494	Ba4554 ppm .00508	Be3130 ppm .00082	Bi2230 ppm .10303	Ca3179 ppm .21841	Cd2288 ppm .00497	Co2286 ppm .00510	Cr2055 ppm .00977
#1	.01155	.10483	.00539	.09398	.00481	.00080	.10401	.21429	.00498	.00498	.00942
#2	.01039	.10431	.01304	.09589	.00535	.00084	.10205	.22254	.00497	.00521	.01012
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	Cu3247 ppm .01108	Fe2599 ppm .03284	K_7664 ppm 1.1326	Li6707 ppm .01186	Mg2790 ppm .20335	Mn2576 ppm .00347	Mo2020 ppm .00965	Na5895 ppm .99397	Ni2316 ppm .01033	P_1782 ppm .93420	Pb2203 ppm W .00168
#1	.01072	.03106	1.1110	.01149	.20541	.00350	.00957	.97788	.00991	.92673	.00157
#2	.01145	.03461	1.1543	.01223	.20129	.00343	.00972	1.0101	.01075	.94167	.00178
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00300	-20.490%
Elem Units Avg Stddev %RSD	S_1820 ppm W .07949	Sb2068 ppm .00943	Se1960 ppm W .00519	Si2881 ppm .51454	SiO2 ppm 1.1011	Sn1899 ppm .01734	Sr4077 ppm .00502	Th2837 ppm F .02751	Ti3349 ppm .00935	TI1908 ppm W .01236	U_3701 ppm .06428
#1	.07795	.00848	.00300	.51832	1.1092	.01699	.00498	.03001	.00896	.01209	.04426
#2	.08104	.01037	.00738	.51075	1.0930	.01769	.00505	.02502	.00973	.01264	.08431
Check ? Value Range	Chk Warn .10000	Chk Pass	Chk Warn .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Warn .01000	Chk Pass
								50.000%			
Elem Units Avg Stddev %RSD	V_2924 ppm .00860	Zn2062 ppm .01182	Zr3391 ppm W .00770								
#1	.00856	.01158	.00794								
#2	.00863	.01206	.00746								
Check ? Value Range	Chk Pass	Chk Pass	Chk Warn .01000								
			-20.490%								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3392.0	Y_3600 Cts/S 56458.	Y_3774 Cts/S 6864.1								
#1	3398.2	56115.	6826.4								
#2	3385.7	56801.	6901.8								

Sample Name: ICSA-3279402 Acquired: 6/1/2015 11:14:26 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00008	518.22	.00071	W -.00775	.00027	-.00007	-.00382	471.28	-.00070	.00044	W .00362
Stddev	.00026	1.15	.00201	.00023	.00001	.00005	.00509	1.03	.00007	.00030	.00024
%RSD	312.08	.22225	283.06	2.9892	4.0627	73.196	133.25	.21863	9.5925	66.535	6.52944
#1	.00010	517.40	.00213	-.00791	.00026	-.00003	-.00022	470.55	-.00065	.00065	.00345
#2	-.00027	519.03	-.00071	-.00759	.00028	-.00010	-.00743	472.01	-.00074	.00024	.00379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00700 -.00700	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00186 -.00186
High Limit											
Low Limit											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00156	181.76	.10410	W .00629	510.42	W .00122	-.00579	.03346	W .00917	-.01192	W .00758
Stddev	.00037	.28	.02541	.00013	6.84	.00002	.00019	.00329	.00018	.00206	.00121
%RSD	23.638	.15301	24.411	2.1457	1.3399	1.2595	3.3402	9.8335	1.9947	17.321	15.971
#1	.00182	181.56	.12207	.00619	515.26	.00121	-.00592	.03113	.00930	-.01338	.00672
#2	.00130	181.95	.08613	.00638	505.59	.00124	-.00565	.03578	.00904	-.01046	.00843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00522 -.00522	Chk Pass	Chk Warn .00050 -.00050	Chk Pass	Chk Pass	Chk Warn .00258 -.00258	Chk Pass	Chk Warn .00500 -.00500
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.11497	W -.01130	.00255	W .01164	.02490	.00036	W .00451	W .01551	W -.00118	-.00752	-.13980
Stddev	.00217	.00554	.00125	.00277	.00592	.00214	.00020	.00055	.00009	.00358	.00982
%RSD	1.8865	48.981	49.015	23.764	23.764	590.45	4.4681	3.5286	7.6633	47.649	7.0239
#1	-.11651	-.01522	.00343	.01359	.02909	-.00115	.00465	.01589	-.00124	-.01005	-.13285
#2	-.11344	-.00739	.00166	.00968	.02072	.00187	.00436	.01512	-.00111	-.00499	-.14674
Check ?	Chk Pass	Chk Warn .00628 -.00628	Chk Pass	Chk Warn .00694 -.06940	None	Chk Pass	Chk Warn .00050 -.00050	Chk Warn .00800 -.00800	Chk Warn .00100 -.00100	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	W .00229	.00135	W -.00612								
Stddev	.00009	.00124	.00067								
%RSD	4.0339	92.347	11.003								
#1	.00236	.00222	-.00660								
#2	.00223	.00047	-.00564								
Check ?	Chk Warn .00222 -.00222	Chk Pass	Chk Warn .00476 -.00476								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2990.5	49736.	6710.1								
Stddev	.1	46.	43.0								
%RSD	.00497	.09174	.64062								
#1	2990.6	49769.	6740.5								
#2	2990.3	49704.	6679.7								

Sample Name: ICSAB-3290308 Acquired: 6/1/2015 11:19:00 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	1.0582	511.58	1.9231	1.8881	.49455	.47545	.95069	461.74	1.0092	.45525	.42072	.51138	179.45
Stddev	.0043	.28	.0043	.0000	.00022	.00002	.00005	.56	.0000	.00016	.00102	.00540	.01
%RSD	.40602	.05493	.22118	.00010	.04405	.00380	.00555	.12178	.00226	.03491	.24228	1.0553	.00650
#1	1.0552	511.78	1.9201	1.8881	.49470	.47544	.95066	461.34	1.0092	.45536	.42144	.50756	179.45
#2	1.0613	511.38	1.9261	1.8881	.49439	.47546	.95073	462.14	1.0092	.45513	.42000	.51520	179.44

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	50.999	1.0113	500.39	.48636	.90679	49.584	.92302	1.9054	.90633	.90094	.94324	4.6505	10.579
Stddev	.017	.0002	5.82	.00143	.00150	.174	.00358	.0006	.00071	.00247	.00819	.0347	.001
%RSD	.03395	.01870	1.1635	.29327	.16575	.35190	.38818	.03092	.07845	.27461	.86859	.74526	.00935
#1	51.011	1.0112	504.51	.48737	.90785	49.461	.92555	1.9058	.90684	.90269	.94904	4.6750	10.579
#2	50.986	1.0115	496.28	.48535	.90573	49.707	.92049	1.9049	.90583	.89919	.93745	4.6260	10.578

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	22.638	8.7463	.95196	2.0117	.95374	8.2620	-.14759	.50171	.93924	.89285
Stddev	.002	.0100	.00027	.0045	.00091	.0565	.06283	.00082	.00910	.00250
%RSD	.00935	.11402	.02886	.22460	.09576	.68386	42.570	.16413	.96875	.27945
#1	22.640	8.7534	95177	2.0149	.95439	8.3019	-.10317	.50229	.94567	.89462
#2	22.637	8.7393	.95215	2.0085	.95310	8.2220	-.19202	.50112	.93281	.89109

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass					
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3025.3	50331.	6782.5										
Stddev	5.6	284.	51.0										
%RSD	.18432	.56515	.75129										
#1	3021.4	50130.	6746.5										
#2	3029.3	50532.	6818.6										

Sample Name: LRA-3255707 Acquired: 6/1/2015 11:21:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00338	-.28082	9.4749	9.2702	11.789	-.00560	-.01175	.02614	1.9638	4.8265	9.3258	10.119	481.33
Stddev	.00027	.00114	.0169	.0293	.138	.00008	.00173	.00007	.0016	.0051	.0001	.004	1.24
%RSD	7.9057	.40727	.17856	.31562	1.1722	1.5148	14.760	.27146	.08348	.10478	.00094	.03557	.25838
#1	.00356	-.28001	9.4630	9.2495	11.887	-.00566	-.01297	.02619	1.9627	4.8229	9.3258	10.117	482.21
#2	.00319	-.28163	9.4869	9.2908	11.691	-.00554	-.01052	.02609	1.9650	4.8301	9.3259	10.122	480.45

Check ? Value Range	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	-.01823	.00274	-.01753	9.6779	4.7439	-.03264	9.7427	-.00024	9.6463	-.04445	.01227	4.7817	47.424
Stddev	.05163	.00237	.00219	.0806	.0006	.00284	.0037	.00243	.0103	.00861	.00010	.0185	.032
%RSD	283.17	86.599	12.501	.83310	.01182	8.7085	.03759	1008.2	.10646	19.371	.81551	.38644	.06738
#1	.01827	.00106	-.01598	9.6209	4.7435	-.03063	9.7401	.00148	9.6390	-.05054	.01234	4.7948	47.401
#2	-.05474	.00441	-.01908	9.7350	4.7443	-.03465	9.7453	-.00196	9.6535	-.03836	.01219	4.7687	47.446

Check ? Value Range	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	101.49	.01980	9.5391	.05600	9.7139	4.9526	-.32079	9.6866	9.4590	-.01225
Stddev	.07	.00077	.3032	.00386	.0061	.0132	.01702	.0230	.0197	.00198
%RSD	.06738	3.8981	3.1788	6.8982	.06323	.26741	5.3054	.23746	.20780	16.192
#1	101.44	.02034	9.3247	.05327	9.7183	4.9620	-.33282	9.7028	9.4729	-.01365
#2	101.53	.01925	9.7536	.05873	9.7096	4.9433	-.30875	9.6703	9.4451	-.01084

Check ? Value Range	None	None	Chk Pass	None	Chk Pass	None	Chk Pass	Chk Pass	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3327.0	56332.	6993.3								
Stddev	1.0	213.	7.4								
%RSD	.03007	.37798	.10612								
#1	3327.7	56182.	6988.0								
#2	3326.3	56483.	6998.5								

Sample Name: CCVH-3294468 Acquired: 6/1/2015 11:24:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00266	49.242	-.00480	.01543	.00115	.00000	1.0064	.03221	-.00001	-.00026	.00078	.00079	49.756
Stddev	.00011	.002	.00202	.00149	.00015	.00012	.0002	.00227	.00008	.00026	.00014	.00041	.048
%RSD	4.1795	.00492	42.053	9.6867	13.010	13953.	.01844	7.0353	1096.6	101.25	18.568	52.733	.09626
#1	.00274	49.244	-.00337	.01648	.00126	.00009	1.0066	.03061	-.00006	-.00007	.00068	.00108	49.789
#2	.00258	49.240	-.00623	.01437	.00105	-.00008	1.0063	.03382	.00005	-.00044	.00088	.00049	49.722

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16957	.00508	.04499	-.00130	.00074	245.93	.00284	-.00465	.00168	4.9328	-.00714	-.00007	.03059
Stddev	.04378	.00054	.00383	.00004	.00057	.22	.00036	.00166	.00098	.0541	.00011	.00132	.00813
%RSD	25.817	10.625	8.5070	3.0623	77.438	.08920	12.499	35.722	58.446	1.0967	1.5175	1798.2	26.589
#1	.20053	.00470	.04770	-.00127	.00033	245.77	.00259	-.00582	.00099	4.9710	-.00721	-.00101	.03634
#2	.13862	.00546	.04229	-.00133	.00114	246.08	.00309	-.00347	.00238	4.8945	-.00706	.00086	.02484

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	.06546	-.00387	.00065	4.9011	-.01147	.00251	10.254	.00191	-.00169	-.12652			
Stddev	.01741	.00056	.00016	.0007	.00004	.00096	.151	.00052	.00019	.00100			
%RSD	26.589	14.463	24.222	.01340	.32093	38.285	1.4714	27.326	11.223	.79428			
#1	.07777	-.00426	.00076	4.9016	-.01145	.00319	10.360	.00228	-.00155	-.12581			
#2	.05315	-.00347	.00054	4.9007	-.01150	.00183	10.147	.00154	-.00182	-.12724			

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3326.6	55935.	6992.3										
Stddev	14.6	71.	18.3										
%RSD	.43830	.12665	.26149										
#1	3316.3	55885.	6979.3										
#2	3336.9	55985.	7005.2										

Sample Name: CCV-3296664 Acquired: 6/1/2015 11:27:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.50134	.52089	.98653	.51014	.48991	.49017	.00033	5.0270	.49843	.51449	.49621	.49757	2.4985
Stddev	.00117	.00087	.00158	.00059	.00074	.00141	.00350	.0077	.00063	.00128	.00275	.00070	.0032
%RSD	.23404	.16742	.15993	.11530	.15138	.28795	1054.8	.15303	.12619	.24888	.55483	.13996	.12774
#1	.50051	.52151	.98764	.51056	.48939	.48917	.00281	5.0215	.49887	.51358	.49426	.49806	2.5007
#2	.50217	.52028	.98541	.50973	.49044	.49116	-.00215	5.0324	.49798	.51540	.49815	.49708	2.4962

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	49.596	.99452	20.141	.50348	.49707	4.9306	.51465	.99446	1.0046	-.01833	.98786	.97188	5.0787
Stddev	.139	.00018	.005	.00060	.00244	.0072	.00151	.00616	.0051	.00133	.00129	.00120	.0181
%RSD	.27937	.01846	.02535	.11912	.49175	.14675	.29297	.61948	.50674	7.2357	.13101	.12351	.35575
#1	49.498	.99465	20.144	.50390	.49534	4.9357	.51359	.99010	1.0010	-.01739	.98695	.97104	5.0659
#2	49.694	.99439	20.137	.50305	.49880	4.9255	.51572	.99881	1.0082	-.01927	.98878	.97273	5.0914

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.868	1.0076	.49017	-.00480	.49843	1.0167	-.00565	.50115	.50383	.49853
Stddev	.039	.0028	.00166	.00292	.00025	.0083	.01085	.00182	.00467	.00296
%RSD	.35575	.28175	.33813	60.868	.05078	.81367	192.24	.36325	.92653	.59308
#1	10.841	1.0056	.48900	-.00686	.49825	1.0109	.00203	.49986	.50713	.50062
#2	10.896	1.0096	.49134	-.00273	.49861	1.0226	-.01332	.50243	.50053	.49644

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3350.7	55992.	7031.9									
Stddev	9.2	12.	27.3									
%RSD	.27568	.02224	.38864									
#1	3344.2	55983.	7012.6									
#2	3357.3	56001.	7051.3									

Sample Name: CCB Acquired: 6/1/2015 11:29:51 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-00035	.00074	-00203	.00682	.00016	-00007	-00024	.00151	.00006	-00003	.00002
Stddev	.00056	.00093	.00250	.00019	.00018	.00004	.00039	.00153	.00028	.00014	.00017
%RSD	161.50	126.07	123.61	2.7653	114.01	54.774	159.04	101.45	434.32	496.44	776.27
#1	.00005	.00008	-.00380	.00696	.00029	-.00004	.00003	.00043	.00026	.00007	.00015
#2	-.00075	.00139	-.00026	.00669	.00003	-.00009	-.00052	.00260	-.00013	-.00012	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00135	.00289	.17771	.00424	.00404	.00004	.00011	-.03790	-.00001	-.00800	.00046
Stddev	.00046	.00030	.02048	.00086	.00441	.00013	.00029	.00386	.00005	.00056	.00127
%RSD	34.174	10.483	11.525	20.376	108.92	298.03	263.62	10.173	476.59	6.9469	272.31
#1	.00103	.00267	.19220	.00363	.00093	.00013	.00032	-.04063	.00003	-.00840	.00136
#2	.00168	.00310	.16323	.00485	.00716	-.00005	-.00010	-.03518	-.00005	-.00761	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01947	-.00010	F -.00596	.01678	.03590	-.00129	.00014	-.00164	.00003	.00119	.02351
Stddev	.00090	.00175	.00164	.00189	.00405	.00014	.00009	.00111	.00011	.00202	.00927
%RSD	4.6489	1733.3	27.483	11.288	11.288	10.980	60.623	67.367	360.93	169.33	39.415
#1	-.02011	-.00134	-.00480	.01812	.03877	-.00139	.00021	-.00086	-.00005	-.00024	.03007
#2	-.01883	.00114	-.00712	.01544	.03304	-.00119	.00008	-.00243	.00010	.00262	.01696
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00055	-.00102	-.00187								
Stddev	.00042	.00061	.00137								
%RSD	75.746	60.437	73.671								
#1	-.00084	-.00145	-.00284								
#2	-.00026	-.00058	-.00089								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3399.2	57127.	7030.1								
Stddev	13.7	366.	69.0								
%RSD	.40363	.64075	.98111								
#1	3389.5	57386.	6981.3								
#2	3408.9	56868.	7078.8								

Sample Name: CCVL-3302200 Acquired: 6/1/2015 11:32:46 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00931	.10916	.01610	.10463	.01055	.00092	.10794	.21903	.00511	.01041	.01043	.01638
Stddev	.00037	.00055	.00238	.00123	.00008	.00004	.00095	.00049	.00018	.00037	.00025	.00011
%RSD	3.9696	.50323	14.768	1.1728	.74354	4.2141	.88144	.22197	3.5644	3.5562	2.3947	.68740

#1	.00957	.10877	.01778	.10550	.01061	.00089	.10861	.21868	.00498	.01067	.01025	.01630
#2	.00905	.10955	.01442	.10376	.01049	.00094	.10727	.21937	.00524	.01015	.01061	.01646

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10096	3.3120	F .01544	.21927	.01085	.02017	1.0135	.04212	2.8950	.00976	-.01586	.00863
Stddev	.00065	.0807	.00041	.00597	.00035	.00043	.0040	.00014	.0279	.00103	.00310	.00496
%RSD	.64313	2.4367	2.6664	2.7238	3.1977	2.1260	.39675	.33295	.96470	10.574	19.523	57.515
#1	.10050	3.3691	.01573	.21505	.01061	.02047	1.0163	.04222	2.9147	.01049	-.01805	.00512
#2	.10142	3.2549	.01515	.22350	.01110	.01987	1.0106	.04202	2.8752	.00903	-.01367	.01214

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01180	.51212	1.0959	.09952	.01044	.01361	.00939	.01630	.06310	.00991	.02278	.01266
Stddev	.00112	.01250	.0268	.00071	.00004	.00014	.00017	.00179	.00879	.00006	.00111	.00014
%RSD	9.4769	2.4415	2.4415	.70926	.41495	1.0615	1.8331	10.951	13.923	.62395	4.8535	1.1059
#1	.01101	.52096	1.1149	.10002	.01047	.01351	.00927	.01504	.05689	.00986	.02199	.01256
#2	.01259	.50328	1.0770	.09902	.01041	.01371	.00951	.01756	.06932	.00995	.02356	.01276

Check ? Value Range	Chk Pass											
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3398.1	56748.	7072.2									
Stddev	19.1	680.	92.3									
%RSD	.56195	1.1980	1.3049									
#1	3384.6	57229.	7006.9									
#2	3411.6	56268.	7137.5									

Sample Name: LB 280-278466/1-F Acquired: 6/1/2015 11:36:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/28 Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00069	As1890 ppm .00803	B_2089 ppm .00270	Ba4554 ppm .00947	Be3130 ppm .00115	Bi2230 ppm .00010	Ca3179 ppm W .12403	Cd2288 ppm .00001
#1	-.00057	.00782	-.00321	.00977	.00087	-.00005	.00163	.12340	-.00008
#2	-.00081	.00824	-.00220	.00917	.00142	-.00015	-.00180	.12465	.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00051	Cu3247 ppm .00006	Fe2599 W .05108	K_7664 ppm .00506	Li6707 ppm .21121	Mg2790 ppm .00366	Mn2576 ppm .01976	Mo2020 ppm .00129
#1	-.00076	.00016	.00542	.05145	.20350	.00375	.02233	.00130	-.00078
#2	-.00026	-.00005	.00470	.05071	.21893	.00357	.01720	.00128	-.00042
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn .05000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .312.46	P_1782 ppm .00011	Pb2203 ppm .00574	S_1820 ppm .02134	Sb2068 ppm .00855	Se1960 ppm .00403	Si2881 ppm .00350	SiO2 ppm .01235
#1	312.69	.00021	-.00676	.02169	-.00851	-.00237	-.00446	.00297	.00636
#2	312.23	.00002	-.00472	.02099	-.00859	-.00570	-.00255	.02172	.04649
Check ? High Limit Low Limit	None	Chk Pass	Chk Pass	Chk Fail .00900 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00077	Th2837 ppm .00054	Ti3349 ppm .00190	Tl1908 ppm .00036	U_3701 ppm .00061	V_2924 ppm .00653	Zn2062 ppm .00160	Zr3391 ppm .00303
#1	-.00199	.00056	-.00208	-.00034	.00152	-.00515	-.00211	.00314	-.00299
#2	.00044	.00051	-.00173	-.00038	-.00030	-.00791	-.00108	.00292	-.00449
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3208.7	Y_3774 Cts/S 54019.	377.433 {89}					
#1	3204.6	54353.	6997.5						
#2	3212.8	53684.	29.3						

Sample Name: LCS 280-278466/2-F Acquired: 6/1/2015 11:39:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .22014	As1890 ppm .42352	B_2089 ppm .82882	Ba4554 ppm .21322	Be3130 ppm .24734	Bi2230 ppm .01037	Ca3179 ppm .40581	Cd2288 ppm .10431
#1	.22018	.42566	.82868	.21501	2.4710	.01044	.40684	10.428	.23479
#2	.22009	.42139	.82896	.21143	2.4759	.01031	.40477	10.433	.23290
Check ? High Limit Low Limit	Chk Pass	Chk Warn .43200 1.7200	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .10308	Cu3247 ppm .97224	Fe2599 ppm .46626	K_7664 ppm .22224	Li6707 ppm F 11.043	Mg2790 ppm .21755	Mn2576 ppm .10099	Mo2020 ppm .10462
#1	.10413	.97130	.46780	.22554	11.204	.22092	10.091	.10441	.21453
#2	.10203	.97317	.46473	.21894	10.881	.21418	10.107	.10483	.21215
Check ? High Limit Low Limit	Chk Pass	Chk Fail .25200 .16800	Chk Pass	Chk Pass	Chk Fail 11.000 8.9000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm F 332.34	P_1782 ppm .10360	Pb2203 ppm 2.1362	S_1820 ppm .1456	Sb2068 ppm .41261	Se1960 ppm F 10804	Si2881 ppm .62603	SiO2 ppm 2.1346
#1	332.15	.10439	2.1519	1.1523	.41418	.11061	.62553	2.1441	4.5884
#2	332.54	.10282	2.1204	1.1388	.41103	.10548	.62653	2.1251	4.5477
Check ? High Limit Low Limit	Chk Fail 11.200 9.1000	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail .10800 .08800	Chk Pass	Chk Pass	Chk Fail 4.9220 4.0200
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .40913	Th2837 ppm .20471	Ti3349 ppm .20606	Tl1908 ppm .21164	U_3701 ppm .39503	V_2924 ppm .42832	Zn2062 ppm .10414	Zr3391 ppm .54999
#1	.41259	.20462	.20559	.21196	.40056	.42867	.10521	.54722	.09926
#2	.40568	.20480	.20653	.21131	.38951	.42798	.10307	.55275	.09397
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3151.4	Y_3774 Cts/S 52601.	377.433 {89}					
#1	3142.6	52864.	6659.0						
#2	3160.2	52339.	6694.9						

Sample Name: 280-69513-A-5-D Acquired: 6/1/2015 11:42:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00013	As1890 ppm .01483	B_2089 ppm .00278	Ba4554 ppm .00845	Be3130 ppm .39656	Bi2230 ppm -.00010	Ca3179 ppm -.00088	Cd2288 ppm 146.13
#1	.00006	.01464	-.00472	.00840	.39424	-.00011	-.00104	145.41	.00042
#2	-.00032	.01503	-.00083	.00850	.39888	-.00010	-.00072	146.85	.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00052	Cu3247 ppm .00068	Fe2599 ppm .00485	K_7664 ppm .02852	Li6707 ppm .91359	Mg2790 ppm .00764	Mn2576 ppm 4.3262	Mo2020 ppm .15123
#1	.00052	.00066	.00509	.02941	.90183	.00777	4.3181	.15080	-.00251
#2	.00051	.00070	.00460	.02762	.92534	.00750	4.3343	.15166	-.00238
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 315.35	P_1782 ppm .00825	Pb2203 ppm .00422	S_1820 ppm .05271	Sb2068 ppm .91880	Se1960 ppm .00460	Si2881 ppm -.00260	SiO2 ppm .86413
#1	313.86	.00845	.00754	.05386	.91128	.00455	-.00382	.83613	1.7893
#2	316.84	.00806	.00090	.05156	.92632	.00466	-.00137	.89212	1.9091
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00077	Th2837 ppm .28143	Ti3349 ppm .00003	Tl1908 ppm -.00096	U_3701 ppm W -.01004	V_2924 ppm -.04044	Zn2062 ppm -.00074	Zr3391 ppm .00429
#1	-.00104	.27978	.00177	-.00127	-.00738	-.02817	-.00063	.00384	-.00348
#2	-.00050	.28309	-.00171	-.00064	-.01269	-.05271	-.00085	.00475	-.00172
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3134.0	Y_3774 Cts/S 52651.	377.433 {89}					
#1	3130.6	52709.	6774.8						
#2	3137.5	52593.	6762.0						

Sample Name: 280-69513-A-6-H Acquired: 6/1/2015 11:44:48 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	.09898	.00162	.00829	.40337	-.00011	.00017	107.22	.00074
Stddev	.00018	.00146	.00386	.00117	.00275	.00005	.00092	.39	.00002
%RSD	45.457	1.4738	238.03	14.077	.68163	42.412	540.84	.36785	2.6623
#1	-.00052	.09795	.00435	.00746	.40143	-.00007	-.00048	106.94	.00075
#2	-.00027	.10001	-.00111	.00911	.40532	-.00014	.00082	107.50	.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	.00088	.00492	.04084	.63532	.00622	2.9158	.00775	-.00269
Stddev	.00019	.00016	.00009	.00008	.01464	.00089	.0059	.00001	.00003
%RSD	45.118	17.596	1.8119	.19940	2.3050	14.339	.20068	.19017	1.2382
#1	-.00029	.00099	.00486	.04078	.64568	.00686	2.9117	.00774	-.00272
#2	-.00057	.00077	.00499	.04090	.62497	.00559	2.9200	.00776	-.00267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	313.23	.00411	.02124	.01092	.14229	.00161	-.00137	1.1491	2.4590
Stddev	1.38	.00015	.00056	.00100	.00803	.00041	.00136	.0040	.0086
%RSD	.44155	3.5408	2.6158	9.1861	5.6419	25.484	99.324	.35099	.35099
#1	312.25	.00421	.02085	.01021	.14796	.00190	-.00234	1.1462	2.4529
#2	314.20	.00400	.02164	.01163	.13661	.00132	-.00041	1.1519	2.4651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.17513	-.00126	-.00036	-.00658	-.00227	-.00021	.01378	-.00267
Stddev	.00154	.00090	.00307	.00016	.00318	.02922	.00067	.00013	.00040
%RSD	3038.4	.51648	243.37	45.695	48.272	1287.7	322.18	.93847	14.816
#1	.00114	.17450	-.00343	-.00024	-.00883	-.02293	.00027	.01369	-.00239
#2	-.00104	.17577	.00091	-.00047	-.00433	.01839	-.00068	.01387	-.00295
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3127.1	52557.	6736.1						
Stddev	3.4	75.	3.7						
%RSD	.10995	.14254	.05533						
#1	3129.5	52610.	6738.8						
#2	3124.6	52505.	6733.5						

Sample Name: 280-69513-A-6-H SD@5 Acquired: 6/1/2015 11:47:34 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00067	As1890 ppm .02183	B_2089 ppm .00033	Ba4554 ppm .00186	Be3130 ppm .08434	Bi2230 ppm -.00013	Ca3179 ppm -.00142	Cd2288 ppm 21.898
#1	-.00044	.02177	.00123	.00206	.08433	-.00017	-.00025	21.898	-.00003
#2	-.00090	.02190	-.00056	.00166	.08435	-.00008	-.00259	21.899	.00001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00001	Cu3247 ppm .00017	Fe2599 ppm .00272	K_7664 ppm .09636	Li6707 ppm .26874	Mg2790 ppm .00383	Mn2576 ppm .62096	Mo2020 ppm .00233
#1	-.00019	.00033	.00243	.09590	.25612	.00387	.61982	.00231	-.00129
#2	.00020	.00000	.00300	.09683	.28137	.00378	.62210	.00235	-.00077
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .65.019	P_1782 ppm .00184	Pb2203 ppm -.00256	S_1820 ppm .00392	Sb2068 ppm .00795	Se1960 ppm -.00405	Si2881 ppm W -.00539	SiO2 ppm .22367
#1	64.939	.00164	-.00331	.00396	.00713	-.00360	-.00777	.21752	.46550
#2	65.098	.00203	-.00182	.00387	.00876	-.00449	-.00301	.22981	.49180
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00386	Th2837 ppm .03645	Ti3349 ppm -.00165	Tl1908 ppm -.00054	U_3701 ppm -.00201	V_2924 ppm .00122	Zn2062 ppm -.00060	Zr3391 ppm .00372
#1	.00406	.03645	-.00280	-.00046	-.00334	-.00840	-.00037	.00299	-.00153
#2	.00367	.03645	-.00051	-.00062	-.00068	.01084	-.00082	.00446	-.00372
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3241.9	Y_3774 Cts/S 54738.	377.433 {89}					
#1	3241.1	54590.	6715.5						
#2	3242.8	54886.	6727.4						

Sample Name: 280-69513-A-6-I MS Acquired: 6/1/2015 11:50:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .20896 .00174 .83194	As1890 ppm .40598 .00054 .13213	B_2089 ppm .78648 .00634 .80554	Ba4554 ppm 2.6967 .0044 .16337	Be3130 ppm .00969 .00003 .33009	Bi2230 ppm .38908 .00492 1.2639	Ca3179 ppm 110.16 .24 .22175	Cd2288 ppm .22208 .00010 .04602
#1	.20773	.40560	.79096	.20091	2.6936	.00972	.39256	109.99	.22215
#2	.21019	.40635	.78200	.20150	2.6998	.00967	.38560	110.33	.22201
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm W .90981 .00048 .50610	Cu3247 ppm .44629 .00566 .62261	Fe2599 ppm .21935 .00080 .17947	K_7664 ppm 10.760 .00453 2.0664	Li6707 ppm .21003 .00076 2.1458	Mg2790 ppm 12.068 .014 .36192	Mn2576 ppm .10425 .00014 .11716	Mo2020 ppm .19942 .00029 .13576
#1	.09613	.91381	.44685	.21615	10.924	.20949	12.078	.10415	.19922
#2	.09544	.90580	.44572	.22256	10.597	.21057	12.058	.10435	.19963
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Na8183 818.326 {41}	Ni2316 ppm 305.41 .23 .07435	P_1782 ppm .09971 .00004 .04359	Pb2203 ppm 1.0564 .0023 .11159	S_1820 ppm .52885 .0028 .26824	Sb2068 ppm .10567 .00669 .12647	Se1960 ppm .59006 .00040 .37909	Si2881 ppm 3.1122 .00083 .14002	SiO2 ppm 6.6601 .0672 2.1605
#1	305.25	.09974	2.0646	1.0544	.52412	.10538	.58948	3.0647	6.5584
#2	305.57	.09968	2.0613	1.0584	.53358	.10595	.59065	3.1598	6.7619
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Sn1899 189.989 {477}	Sr4077 ppm .38366 .00115 .29856	Th2837 ppm .35535 .00040 .11319	Ti3349 ppm .19318 .00160 .82737	Tl1908 ppm .19918 .00050 .24859	U_3701 ppm .35966 .00183 .51000	V_2924 ppm .41315 .01798 4.3513	Zn2062 ppm .09909 .00073 .73759	Zr3391 ppm .51387 .00545 1.0612
#1	.38285	.35564	.19205	.19883	.36096	.42586	.09858	.51001	.09081
#2	.38447	.35507	.19431	.19953	.35837	.40044	.09961	.51773	.09288
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3142.5	Y_3774 Cts/S 53298.	377.433 {89}					
#1	3159.5	53407.	6873.3						
#2	3125.5	53190.	6789.9						

Sample Name: 280-69513-A-6-J MSD Acquired: 6/1/2015 11:52:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .19666	As1890 ppm .39792	B_2089 ppm .74849	Ba4554 ppm 2.5673	Be3130 ppm .00919	Bi2230 ppm F .36652	Ca3179 ppm 105.31	Cd2288 ppm .20991
#1	.19604	.39867	.75200	.19094	2.5636	.00906	.36588	105.12	.20987
#2	.19727	.39716	.74498	.19153	2.5710	.00932	.36717	105.50	.20995
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .09125	Cu3247 ppm W .85569	Fe2599 ppm .42135	K_7664 ppm 259.940 {130}	Li6707 ppm 766.490 {44}	Mg2790 ppm 670.784 { 50}	Mn2576 ppm 279.079 {121}2	Mo2020 ppm 257.610 {131}
#1	.09123	.85605	.42163	.20824	10.200	.19333	11.558	.09897	.18873
#2	.09128	.85532	.42107	.21177	10.329	.19848	11.595	.09979	.18890
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 { 41}	Ni2316 ppm 290.56	P_1782 ppm .09551	Pb2203 ppm 1.9491	S_1820 ppm 1.0042	Sb2068 ppm .50628	Se1960 ppm .10228	Si2881 ppm .55979	SiO2 ppm 288.158 {117}288.158 {117}2
#1	290.30	.09594	1.9511	1.0061	.51541	.10146	.55721	2.8783	6.1595
#2	290.82	.09509	1.9470	1.0023	.49715	.10310	.56237	2.9193	6.2474
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .36299	Th2837 ppm .33863	Ti3349 ppm .18613	Tl1908 ppm .18929	U_3701 ppm .34195	V_2924 ppm .37737	Zn2062 ppm .09465	Zr3391 ppm .49283
#1	.36384	.33808	.18413	.18879	.34269	.39296	.09488	.49118	.08337
#2	.36213	.33918	.18813	.18979	.34120	.36178	.09442	.49448	.08686
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3111.8	Y_3774 Cts/S 52224.	377.433 { 89}					
#1	3102.5	52358.	6633.3						
#2	3121.0	52090.	6649.6						

Sample Name: 280-69513-A-6-H PDS Acquired: 6/1/2015 11:55:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04979	1.0623	.19623	.10436	.49493	.04940	.00192	124.24	.05129
Stddev	.00031	.0037	.00159	.00116	.00012	.00003	.00087	.07	.00054
%RSD	.63065	.34624	.81097	1.1153	.02518	.05560	45.111	.05315	1.0601
#1	.04957	1.0649	.19510	.10519	.49484	.04938	.00254	124.19	.05167
#2	.05001	1.0597	.19735	.10354	.49502	.04942	.00131	124.28	.05090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04804	.04481	.05480	1.0458	.21.011	.10739	21.876	.05716	.04649
Stddev	.00013	.00014	.00017	.0055	.008	.00258	.022	.00014	.00068
%RSD	.27193	.31452	.31082	.52250	.04025	2.4025	.10007	.25187	1.4671
#1	.04794	.04491	.05492	1.0497	21.005	.10921	21.892	.05726	.04697
#2	.04813	.04471	.05468	1.0420	21.017	.10556	21.861	.05706	.04601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	330.18	.05260	W 2.0865	.10475	.13441	.09726	.19730	6.0796	13.010
Stddev	.65	.00014	.0099	.00041	.00035	.00451	.00140	.0313	.067
%RSD	.19779	.26589	.47435	.39290	.26330	4.6405	.71028	.51476	.51476
#1	330.64	.05250	2.0935	.10446	.13466	.10045	.19830	6.1017	13.058
#2	329.72	.05270	2.0795	.10504	.13416	.09407	.19631	6.0575	12.963
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09654	.22121	.19933	.04892	.17647	.51229	.04984	.22429	.04122
Stddev	.00003	.00009	.00027	.00039	.00203	.02749	.00034	.00620	.00165
%RSD	.03371	.04216	.13465	.78924	1.1477	5.3658	.69122	2.7633	4.0097
#1	.09652	.22115	.19914	.04919	.17504	.49285	.05008	.22868	.04239
#2	.09656	.22128	.19952	.04864	.17790	.53172	.04960	.21991	.04005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3090.6	52250.	6809.9						
Stddev	17.1	116.	14.1						
%RSD	.55347	.22193	.20675						
#1	3102.7	52332.	6819.8						
#2	3078.5	52168.	6799.9						

Sample Name: 280-69516-A-1-D Acquired: 6/1/2015 11:58:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00114	As1890 ppm .01003	B_2089 ppm .00207	Ba4554 ppm .00934	Be3130 ppm .16820	Bi2230 ppm -.00006	Ca3179 ppm -.00019	Cd2288 ppm 1.3117
#1	-.00147	.01085	-.00262	.00941	.16929	-.00008	-.00091	1.3072	.00342
#2	-.00082	.00922	-.00151	.00927	.16712	-.00004	.00054	1.3162	.00317
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00085	Cu3247 ppm W .66170	Fe2599 ppm .00714	K_7664 ppm .01475	Li6707 ppm .52153	Mg2790 ppm .00447	Mn2576 ppm .06340	Mo2020 ppm .00368
#1	.00096	.67307	.00682	.01458	.51513	.00541	.06323	.00357	.00108
#2	.00074	.65033	.00746	.01492	.52793	.00354	.06357	.00379	.00073
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 333.85	P_1782 ppm .00030	Pb2203 ppm 1.1617	S_1820 ppm .00247	Sb2068 ppm .29279	Se1960 ppm .00487	Si2881 ppm -.00209	SiO2 ppm .08484
#1	335.07	.00035	1.1646	.00159	.29293	.00589	-.00171	.07819	.16733
#2	332.63	.00026	1.1588	.00335	.29264	.00385	-.00248	.09148	.19577
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00709	Th2837 ppm 2.1261	Ti3349 ppm -.00248	Tl1908 ppm -.00069	U_3701 ppm .00237	V_2924 ppm .02458	Zn2062 ppm -.00121	Zr3391 ppm 3.9561
#1	.00716	2.1337	-.00276	-.00054	.00279	.02907	-.00139	3.9585	-.00186
#2	.00701	2.1186	-.00221	-.00085	.00196	.02009	-.00103	3.9536	-.00269
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3192.0	Y_3774 Cts/S 54080.	377.433 {89}					
#1	3259.1	53728.	6792.4						
#2	3124.8	54433.	6890.1						

Sample Name: 280-69516-A-2-D Acquired: 6/1/2015 12:01:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279206 6010C (As) Q5

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00020	As1890 ppm .04146	B_2089 ppm .00572	Ba4554 ppm .00810	Be3130 ppm .15834	Bi2230 ppm .00010	Ca3179 ppm 5.1961	Cd2288 ppm .03750
#1	.00009	.04145	-.00922	.00853	.15790	-.00020	-.00059	5.2200	.03753
#2	-.00048	.04147	-.00222	.00768	.15878	.00000	.00057	5.1721	.03746
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00011	Cu3247 ppm W .31150	Fe2599 ppm .00926	K_7664 ppm .07213	Li6707 ppm .72542	Mg2790 ppm .00613	Mn2576 ppm .17451	Mo2020 ppm .01400
#1	.00001	.31369	.00882	.07232	.73386	.00611	.17095	.01388	-.00095
#2	.00021	.30931	.00970	.07194	.71697	.00615	.17807	.01411	-.00044
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 322.28	P_1782 ppm .00128	Pb2203 ppm .71230	S_1820 ppm .00901	Sb2068 ppm .17479	Se1960 ppm -.00145	Si2881 ppm .00499	SiO2 ppm .16317
#1	321.68	.00128	.71775	.00912	.17159	-.00016	.00119	.15435	.33031
#2	322.88	.00128	.70684	.00891	.17799	-.00273	-.01116	.17199	.36806
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00122	Th2837 ppm .94220	Ti3349 ppm -.00131	Tl1908 ppm -.00019	U_3701 ppm -.00020	V_2924 ppm .00105	Zn2062 ppm -.00108	Zr3391 ppm 3.3553
#1	.00213	.94034	-.00007	-.00005	.00148	-.01256	-.00120	3.3218	-.00309
#2	.00031	.94406	-.00255	-.00033	-.00188	.01466	-.00096	3.3887	-.00701
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3073.9	Y_3774 Cts/S 52025.	Th2837 Cts/S 17.4	Ti3349 Cts/S 6500.4	Tl1908 Cts/S 88.2	U_3701 Cts/S 101.50	V_2924 Cts/S 1192.9	Zn2062 Cts/S 1833.6
#1	3086.2	52121.	6562.8	135.	135.	88.2	1833.6	15.597	1.4096
#2	3061.7	51929.	6438.1	135.	135.	88.2	1833.6	15.597	1.4096

Sample Name: CCVH-3294468 Acquired: 6/1/2015 12:03:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00315	Al3092 ppm 49.486	As1890 ppm -.00137	B_2089 ppm -.00173	Ba4554 ppm .00080	Be3130 ppm .00007	Bi2230 ppm .96678	Ca3179 ppm .02706	Cd2288 ppm -.00030	Co2286 ppm -.00039	Cr2055 ppm .00072
#1	.00269	49.385	-.00176	-.00227	.00070	.00003	.96243	.02753	-.00029	-.00044	.00070
#2	.00361	49.586	-.00099	-.00120	.00090	.00011	.97113	.02659	-.00030	-.00034	.00073
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm .00062	Fe2714 ppm 49.389	K_7664 ppm .26750	Li6707 ppm .00572	Mg2790 ppm .04954	Mn2576 ppm -.00147	Mo2020 ppm -.00112	Na8183 ppm 247.70	Ni2316 ppm .00320	P_1782 ppm -.00491	Pb2203 ppm .00203
#1	.00070	49.778	.29510	.00710	.04822	-.00146	-.00117	246.81	.00310	-.00529	.00175
#2	.00054	49.000	.23991	.00434	.05087	-.00148	-.00107	248.59	.00331	-.00454	.00232
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm W 4.7282	Sb2068 ppm -.00887	Se1960 ppm .00139	Si2881 ppm -.01231	SiO2 ppm -.02634	Sn1899 ppm -.00424	Sr4077 ppm .00046	Th2837 ppm 4.9080	Ti3349 ppm -.01295	Tl1908 ppm .00503	U_3701 ppm 10.080
#1	4.7206	-0.01010	.00161	-.01347	-.02882	-.00378	.00050	4.8936	-.01296	.00391	10.077
#2	4.7357	-.00765	.00116	-.01115	-.02386	-.00470	.00042	4.9224	-.01294	.00615	10.083
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00247	Zn2062 ppm -.00187	Zr3391 ppm -.12720								
#1	.00309	-.00210	-.12522								
#2	.00185	-.00164	-.12918								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3101.6	Y_3600 Cts/S 52267.	Y_3774 Cts/S 6471.0								
#1	3119.3	52929.	6443.9								
#2	3084.0	51604.	6498.1								

Sample Name: CCV-3296664 Acquired: 6/1/2015 12:06:21 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49455	.51601	.96058	.47561	.48773	.49158	.00055	5.0610	.48399	.50513	.46542	.48328	2.5364
Stddev	.00126	.00114	.01117	.00801	.00309	.00276	.00150	.0057	.00252	.00438	.00510	.00040	.0038
%RSD	.25476	.22136	1.1631	1.6839	.63395	.56194	271.95	.11264	.52058	.86689	1.0949	.08356	.14822
#1	.49544	.51682	.96848	.48127	.48555	.48962	-.00051	5.0650	.48577	.50823	.46903	.48356	2.5337
#2	.49366	.51520	.95268	.46994	.48992	.49353	.00161	5.0570	.48221	.50203	.46182	.48299	2.5391

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	50.075	.99322	20.098	.50787	.48795	5.0839	.50667	.95161	.97317	-.02283	.93186	.91493	5.0644
Stddev	.307	.00253	.093	.00059	.00335	.0402	.00454	.00977	.01334	.00289	.01587	.01664	.0149
%RSD	.61226	.25501	.46344	.11701	.68685	.79027	.89683	1.0268	1.3706	12.670	1.7033	1.8191	.29421
#1	49.859	.99143	20.164	.50829	.49032	5.0555	.50988	.95852	.98260	-.02487	.94308	.92670	5.0749
#2	50.292	.99501	20.033	.50745	.48558	5.1123	.50346	.94470	.96374	-.02078	.92063	.90316	5.0539

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	10.838	.98164	.48769	-.00507	.50133	.96820	-.01511	.50715	.52546	.49071
Stddev	.032	.01070	.00329	.00232	.00523	.01218	.05339	.00192	.00319	.00180
%RSD	.29421	1.0897	.67496	45.821	1.0431	1.2577	353.29	.37931	.60729	.36665
#1	10.860	.98921	.48536	-.00343	.50503	.97681	-.05287	.50851	.52772	.48943
#2	10.815	.97408	.49002	-.00671	.49764	.95959	.02264	.50579	.52321	.49198

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3194.3	51984.	6259.2								
Stddev	12.2	347.	40.0								
%RSD	.38334	.66810	.63951								
#1	3203.0	51739.	6230.9								
#2	3185.7	52230.	6287.5								

Sample Name: CCB Acquired: 6/1/2015 12:08:50 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-00072	.00002	-00212	-00133	.00030	.00000	.00226	.00434	-00010	-00007	.00008
Stddev	.00018	.00030	.00354	.00050	.00000	.00002	.00022	.00383	.00013	.00014	.00007
%RSD	25.180	1586.9	167.27	37.601	.36006	2573.4	9.5175	88.330	141.85	204.74	85.123
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	-.00011	.23998	.00280	.00270	.00007	-.00012	.05211	.00019	-.00731	-.00046
Stddev	.00040	.00312	.00974	.00093	.00525	.00009	.00005	.01032	.00026	.00038	.00005
%RSD	54.012	2822.0	4.0597	33.209	194.20	122.69	37.744	19.808	140.20	5.1651	10.138
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02242	-.00183	F -.00737	-.00053	-.00114	-.00197	.00013	-.00025	-.00033	-.00016	-.00928
Stddev	.00510	.00026	.00335	.01945	.04162	.00090	.00010	.00008	.00017	.00001	.01387
%RSD	22.734	14.048	45.488	3648.9	3648.9	45.897	79.196	29.937	50.935	8.6004	149.49
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00017	-.00121	-.00459								
Stddev	.00026	.00015	.00279								
%RSD	155.64	12.705	60.697								
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3216.9	53441.	6468.2								
Stddev	1.3	184.	16.1								
%RSD	.03896	.34410	.24952								
#1											
#2											

Sample Name: CCVL-3302200III Acquired: 6/1/2015 12:11:21 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00983	.10820	.01290	.09525	.01046	.00094	.10258	.21478	.00479	.01062	.00980	.01560
Stddev	.00015	.00016	.00219	.00141	.00021	.00002	.00126	.00461	.00031	.00018	.00007	.00028
%RSD	1.5739	.14937	17.007	1.4855	1.9782	1.8475	1.2306	2.1459	6.5054	1.6789	.66614	1.7700

#1	.00972	.10832	.01446	.09425	.01031	.00092	.10169	.21152	.00457	.01049	.00985	.01540
#2	.00994	.10809	.01135	.09625	.01060	.00095	.10347	.21803	.00502	.01074	.00975	.01579

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10306	3.3391	.01251	.21873	.01084	.01927	1.0756	.04180	2.8059	.00997	-.02154	.00716
Stddev	.00114	.0030	.00134	.00423	.00013	.00053	.0251	.00075	.0368	.00121	.00202	.00160
%RSD	1.1033	.09070	10.675	1.9319	1.1906	2.7543	2.3344	1.8006	1.3111	12.177	9.3954	22.321
#1	.10226	3.3412	.01157	.22172	.01093	.01889	1.0579	.04127	2.7799	.01083	-.02010	.00829
#2	.10386	3.3369	.01346	.21575	.01075	.01964	1.0934	.04233	2.8320	.00911	-.02297	.00603

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00928	.51878	1.1102	.09755	.01020	.01348	.00915	.01680	F .03048	.00921	.02341	.01101
Stddev	.00075	.01931	.0413	.00123	.00002	.00130	.00016	.00153	.00794	.00070	.00022	.00036
%RSD	8.1098	3.7216	3.7216	1.2579	.22876	9.6701	1.7179	9.0871	26.063	7.5605	.92566	3.2888
#1	.00875	.53243	1.1394	.09668	.01018	.01441	.00904	.01572	.03610	.00970	.02326	.01126
#2	.00981	.50513	1.0810	.09842	.01021	.01256	.00926	.01788	.02487	.00871	.02356	.01075

Check ? Value Range	Chk Fail .01500 -30.000%	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass						
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3227.7	53695.	6455.1									
Stddev	16.5	3.	71.3									
%RSD	.51168	.00518	1.1041									
#1	3239.4	53697.	6404.7									
#2	3216.0	53693.	6505.5									

Sample Name: MB 280-278175/1-A Acquired: 6/1/2015 12:14:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/27 Custom ID2: Custom ID3:

Comment: 278175 SOIL 6010C (Sb)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .01118	As1890 ppm .01594	B_2089 ppm .00218	Ba4554 ppm .01174	Be3130 ppm .00140	Bi2230 ppm .00012	Ca3179 ppm .00063	Cd2288 ppm .23365
#1	-.00147	.01573	-.00444	.01197	.00128	-.00019	.00022	.23802	-.00027
#2	-.00089	.01615	.00007	.01152	.00152	-.00004	.00105	.22928	-.00041
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .20000 -.20000	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00009	Cu3247 ppm .00026	Fe2599 ppm .00260	K_7664 ppm .22679	Li6707 ppm .22387	Mg2790 ppm .00552	Mn2576 ppm .09178	Mo2020 ppm .00088
#1	.00012	.00012	.00267	.02722	.23488	.00557	.08761	.00087	.00007
#2	.00005	.00040	.00253	.02637	.21285	.00548	.09594	.00089	.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .00500 -.00500	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .13617	P_1782 ppm .00053	Pb2203 ppm .00383	S_1820 ppm .00079	Sb2068 ppm .01470	Se1960 ppm .00312	Si2881 ppm .00533	SiO2 ppm .08389
#1	.12417	.00048	.00329	.00115	-.01409	-.00285	-.00544	.07723	.16527
#2	.14818	.00057	.00436	.00043	-.01531	-.00339	-.00523	.09056	.19379
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00560	Th2837 ppm .00061	Ti3349 ppm .00160	Tl1908 ppm .00010	U_3701 ppm .00013	V_2924 ppm .05008	Zn2062 ppm .00081	Zr3391 ppm .00239
#1	.00585	.00066	-.00176	.00025	.00018	.03332	-.00103	.00221	-.00363
#2	.00535	.00057	-.00143	-.00005	-.00045	.06684	-.00059	.00256	-.00275
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .05000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3276.7	Y_3774 Cts/S 54647.	377.433 {89}	6510.3	6510.3	29.9	29.9	29.9
#1	3285.1	54535.	6489.1						
#2	3268.3	54759.	6531.4						

Sample Name: 280-69335-A-1-A MDLV Acquired: 6/1/2015 12:17:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278175 SOIL 6010C (Sb)

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00534	.07557	.02245	.04717	.00455	.00112	.01826	.73349	.00115
Stddev	.00007	.00109	.00471	.00127	.00004	.00008	.00015	.00298	.00007
%RSD	1.2473	1.4393	20.957	2.7009	.93887	7.4134	.79752	.40651	5.9009
#1	.00530	.07480	.02578	.04627	.00458	.00118	.01815	.73560	.00120
#2	.00539	.07634	.01912	.04807	.00452	.00106	.01836	.73138	.00111
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00389	.00243	.00977	.16972	1.8892	.01543	.22852	.00475	.00871
Stddev	.00024	.00023	.00010	.00137	.0294	.00021	.01257	.00002	.00057
%RSD	6.1112	9.3223	1.0393	.80503	1.5578	1.3799	5.5017	.33892	6.5006
#1	.00372	.00227	.00970	.17069	1.8684	.01528	.21963	.00476	.00911
#2	.00406	.00259	.00985	.16876	1.9100	.01558	.23741	.00473	.00831
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1670	.00514	.05990	.01009	.12234	.01183	.02277	.26357	.56404
Stddev	.0187	.00024	.00083	.00142	.00229	.00153	.00289	.00521	.01114
%RSD	.86135	4.7336	1.3932	14.125	1.8707	12.949	12.708	1.9758	1.9758
#1	2.1538	.00531	.06049	.00908	.12396	.01292	.02072	.25989	.55616
#2	2.1802	.00497	.05931	.01109	.12072	.01075	.02482	.26725	.57192
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04020	.00152	.01210	.00454	.02567	.00795	.00246	.01819	.00847
Stddev	.00044	.00011	.00146	.00029	.00015	.00340	.00006	.00039	.00190
%RSD	1.0854	7.4117	12.058	6.4550	.57567	42.728	2.5772	2.1347	22.421
#1	.04051	.00160	.01107	.00475	.02578	.01035	.00242	.01847	.00713
#2	.03989	.00144	.01313	.00433	.02557	.00555	.00251	.01792	.00982
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	3232.1	54112.	6549.1						
Stddev	3.2	37.	11.7						
%RSD	.09895	.06818	.17872						
#1	3234.3	54086.	6540.8						
#2	3229.8	54138.	6557.3						

Sample Name: 280-69335-A-2-A MDLV Acquired: 6/1/2015 12:19:56 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278175 SOIL 6010C (Sb)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	.00557	.07907	.02173	.04621	.00416	.00107	.01948	.70566	.00136
#1	.00535	.07948	.02581	.04634	.00406	.00108	.01984	.69399	.00150
#2	.00579	.07866	.01765	.04609	.00426	.00106	.01912	.71733	.00121
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Avg	.00381	.00232	.01042	.17102	1.8011	.01531	.23157	.00455	.00896
Stddev	.00003	.00012	.00029	.00587	.0026	.00120	.00368	.00004	.00015
%RSD	.71576	5.2803	2.7766	3.4338	.14179	7.8404	1.5887	.78791	1.6496
#1	.00383	.00223	.01063	.16687	1.7993	.01446	.23418	.00453	.00906
#2	.00379	.00240	.01022	.17517	1.8029	.01616	.22897	.00458	.00886
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Avg	2.1138	.00528	.06292	.00990	.11860	.01111	.02368	.25111	.53737
Stddev	.0517	.00016	.00024	.00149	.00086	.00035	.00080	.03131	.06700
%RSD	2.4452	3.1048	.37849	15.074	.72765	3.1495	3.3855	12.468	12.468
#1	2.0772	.00516	.06309	.01095	.11799	.01086	.02425	.22897	.49000
#2	2.1503	.00539	.06275	.00884	.11921	.01135	.02311	.27325	.58475
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Avg	.04077	.00144	.01184	.00457	.02588	.00961	.00268	.01967	.00953
Stddev	.00008	.00007	.00088	.00003	.00073	.02306	.00008	.00041	.00045
%RSD	.19172	5.0550	7.4592	.67117	2.8297	240.02	3.0138	2.1056	4.7315
#1	.04071	.00139	.01247	.00459	.02640	.02592	.00274	.01938	.00985
#2	.04082	.00150	.01122	.00455	.02536	-.00670	.00262	.01996	.00921
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Int. Std.									
Line									
Units									
Avg	3194.6	53471.	6462.9						
Stddev	2.0	117.	28.3						
%RSD	.06272	.21800	.43725						
#1	3193.2	53553.	6482.9						
#2	3196.0	53388.	6442.9						

Sample Name: 280-69335-A-3-A LOQV Acquired: 6/1/2015 12:22:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 278175 SOIL 6010C (Sb)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.01438	.53407	.02274	.10641	.02116	.00474	.00151	1.2325	.00455
#2	.01449	.53322	.02584	.10625	.02062	.00464	.00210	1.2339	.00479
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00992	.03313	.05158	.81310	3.2147	.01775	.40302	.04632	.02332
#2	.01007	.03299	.05093	.82278	.00046	.00156	.00036	.00050	.00086
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	4.9440	.04119	.48161	.00905	.00074	.01713	.01866	.02349	.1.0551
#2	4.9912	.04163	.47876	.00799	.00031	.00263	.00339	.0147	.0314
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.10803	.01028	.14354	.00889	.00083	.03091	.00931	.01877	.08554
#2	.10792	.01033	.14492	.00877	.00008	.00272	.00140	.00105	.00061
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3200.9	53283.	6437.5						
#2	3203.0	52957.	6435.3						

Sample Name: 69723-D-1-E @5 Acquired: 6/1/2015 12:25:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279392 6010B (Sb) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.52225	-.00197	.00008	.34493	.00541	-.00613	25.374	.00013
Stddev	.00044	.00315	.00066	.00016	.00254	.00002	.00010	.145	.00015
%RSD	116.36	.60240	33.421	189.97	.73754	.34693	1.6421	.56986	111.58
#1	.00007	.52448	-.00151	.00020	.34313	.00543	-.00606	25.272	.00024
#2	.00070	.52003	-.00244	-.00003	.34673	.00540	-.00620	25.476	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00585	.00136	.01056	238.60	.74184	.00596	9.3303	.94954	-.00213
Stddev	.00009	.00002	.00003	1.47	.00322	.00219	.0345	.00222	.00040
%RSD	1.5142	1.4642	.25100	.61705	.43428	36.729	.37033	.23403	18.976
#1	.00578	.00137	.01058	237.56	.73957	.00441	9.3059	.94797	-.00185
#2	.00591	.00135	.01055	239.64	.74412	.00750	9.3547	.95111	-.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96352	.02122	.87122	.00378	2.2138	F -.02303	.00093	14.384	30.782
Stddev	.00881	.00000	.00195	.00096	.0018	.00192	.00181	.062	.132
%RSD	.91473	.01838	.22338	25.478	.08238	8.3368	195.12	.42902	.42902
#1	.96975	.02122	.86984	.00447	2.2125	-.02167	.00221	14.428	30.876
#2	.95728	.02122	.87259	.00310	2.2151	-.02438	-.00035	14.341	30.689
Check ?	Chk Pass	Chk Fail 50.000 -.02000	Chk Pass	Chk Pass	Chk Pass				
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00680	.06766	.03103	.02123	.00166	F -.14575	.00055	.01347	-.00585
Stddev	.00091	.00065	.00095	.00023	.00131	.01345	.00028	.00057	.00156
%RSD	13.436	.96101	3.0465	1.0768	78.765	9.2306	51.685	4.2531	26.689
#1	.00745	.06812	.03170	.02107	.00259	-.13624	.00035	.01388	-.00695
#2	.00616	.06720	.03036	.02139	.00074	-.15527	.00075	.01307	-.00475
Check ?	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass				
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3142.0	52378.	6379.7						
Stddev	1.3	115.	14.7						
%RSD	.04127	.21917	.23080						
#1	3142.9	52459.	6390.1						
#2	3141.1	52297.	6369.3						

Sample Name: 69723-D-1-E SD@25 Acquired: 6/1/2015 12:27:55 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B (Sb) 5x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00036	.10711	-.00153	-.00237	.06999	.00104	-.00128	5.2386	-.00015
#2	.00070	.10759	-.00117	-.00263	.06921	.00112	-.00400	5.1364	-.00033
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2714 271.441 {124}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00149	.00058	.00278	48.835	.36005	.00496	1.9241	.19033	-.00113
#2	.00139	.00036	.00385	48.138	.29333	.00589	1.9142	.18957	-.00104
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	.16197	.00457	.16110	.00032	.40194	-.00619	-.00291	2.8576	6.1153
#2	.00489	.00015	.00105	.00055	.00187	.00116	.00105	.0672	.1437
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00606	.01364	.00240	.00380	.00149	-.02092	-.00064	.00270	-.00513
#2	.00481	.01337	.00424	.00297	.00164	-.05161	-.00069	.00190	-.00373
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3162.5	52586.	6319.3						
#2	3172.0	52638.	6293.7						

Sample Name: 69723-D-1-F MS @5 Acquired: 6/1/2015 12:30:35 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B (Sb) 5x

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01234	W 2.5365	W 3.0295	.22709	.22796	.88363	.01824	F .44345	41.970
Stddev	.00040	.0362	.0128	.00756	.00188	.00006	.00002	.00537	.075
%RSD	3.2078	1.4284	.42238	3.3290	.82442	.00672	.10341	1.2101	.17980
#1	.01262	2.5622	3.0204	.23244	.22929	.88367	.01825	.44724	42.024
#2	.01206	2.5109	3.0385	.22175	.22663	.88358	.01823	.43965	41.917
Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		2.5000	500.00					.10000	
Low Limit		-.05000	3.2000					-.10000	
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02325	.12363	.04350	.07126	276.32	13.431	.26011	22.856	1.1928
Stddev	.00022	.00095	.00052	.00031	.07	.014	.00161	.037	.0030
%RSD	.92498	.76834	1.2049	.43247	.02671	.10576	.61713	.16295	.25511
#1	.02340	.12431	.04387	.07148	276.37	13.441	.25898	22.882	1.1949
#2	.02310	.12296	.04313	.07104	276.27	13.421	.26125	22.830	1.1906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23325	13.200	.13922	W 3.2537	.11825	2.9842	.08145	.44966	18.356
Stddev	.00328	.194	.00207	.0335	.00125	.0290	.00035	.00811	.029
%RSD	1.4063	1.4733	1.4873	1.0283	1.0574	.97169	.43496	1.8034	.15880
#1	.23557	13.063	.14068	3.2773	.11913	3.0047	.08120	.45540	18.335
#2	.23093	13.338	.13775	3.2300	.11736	2.9637	.08170	.44393	18.377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.282	.45950	.31657	.26086	.26023	.45472	.31087	.11970	.13692
Stddev	.062	.00665	.00001	.00009	.00186	.00838	.02482	.00000	.00034
%RSD	.15880	1.4473	.00264	.03458	.71591	1.8435	7.9831	.00415	.24681
#1	39.238	.46420	.31656	.26079	.26154	.46065	.32842	.11970	.13716
#2	39.326	.45480	.31658	.26092	.25891	.44879	.29332	.11971	.13668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.11632								
Stddev	.00323								
%RSD	2.7788								
#1	.11403								
#2	.11860								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 69723-D-1-F MS @5 Acquired: 6/1/2015 12:30:35 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279392 6010B (Sb) 5x

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3134.7	52348.	6297.8
Stddev	8.7	22.	29.7
%RSD	.27692	.04184	.47217
#1	3128.5	52363.	6276.8
#2	3140.8	52332.	6318.8

Sample Name: 69723-D-1-G MSD @5 Acquired: 6/1/2015 12:33:06 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279392 6010B (Sb) 5x

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01146	2.3066	W 2.6535	.21158	.21446	.81282	.01676	F .41588	38.340
Stddev	.00044	.0203	.0290	.00600	.00137	.00234	.00011	.00070	.157
%RSD	3.8725	.87920	1.0936	2.8364	.63841	.28770	.68547	.16911	.40949
#1	.01114	2.3209	2.6329	.21582	.21543	.81447	.01668	.41638	38.451
#2	.01177	2.2922	2.6740	.20733	.21350	.81117	.01685	.41538	38.229
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02156	.11593	.04098	.06678	249.60	12.816	.24429	21.149	1.0651
Stddev	.00020	.00041	.00013	.00071	.70	.093	.00107	.026	.0051
%RSD	.94327	.35006	.32308	1.0576	.28236	.72839	.43976	.12124	.48012
#1	.02170	.11622	.04108	.06628	250.09	12.882	.24505	21.131	1.0687
#2	.02141	.11564	.04089	.06728	249.10	12.750	.24353	21.168	1.0615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21801	12.156	.13165	W 3.0416	.11221	2.7604	.07821	.42127	17.589
Stddev	.00197	.191	.00102	.0132	.00165	.0191	.00424	.00076	.074
%RSD	.90289	1.5673	.77416	.43489	1.4684	.69146	5.4216	.18092	.42238
#1	.21940	12.021	.13237	3.0509	.11105	2.7739	.08121	.42181	17.641
#2	.21662	12.291	.13093	3.0322	.11338	2.7469	.07521	.42073	17.536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	37.640	.43312	.29215	.24125	.23818	.43015	.31118	.11089	.12924
Stddev	.159	.00171	.00079	.00239	.00074	.00285	.03254	.00011	.00090
%RSD	.42238	.39544	.27146	.99157	.31210	.66195	10.457	.09564	.69709
#1	37.753	.43433	.29271	.24294	.23871	.43217	.33419	.11081	.12988
#2	37.528	.43190	.29159	.23956	.23766	.42814	.28817	.11096	.12861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.10589								
Stddev	.00124								
%RSD	1.1753								
#1	.10501								
#2	.10677								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 69723-D-1-G MSD @5 Acquired: 6/1/2015 12:33:06 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279392 6010B (Sb) 5x

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3148.6	52565.	6449.5
Stddev	2.7	436.	52.7
%RSD	.08701	.82986	.81741
#1	3146.6	52257.	6412.2
#2	3150.5	52873.	6486.8

Sample Name: CCVH-3294468 Acquired: 6/1/2015 12:35:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00265	49.729	-.00086	-.00117	.00087	.00001	.98218	.03639	-.00008	-.00029	.00095	.00064	49.230
Stddev	.00053	.023	.00273	.00005	.00012	.00007	.00370	.00292	.00022	.00017	.00033	.00033	.526
%RSD	19.837	.04705	319.15	4.2165	13.929	487.69	.37707	8.0154	280.30	57.310	34.551	51.958	1.0682
#1	.00228	49.746	.00108	-.00114	.00096	.00006	.98480	.03845	-.00023	-.00018	.00072	.00088	49.602
#2	.00302	49.712	-.00279	-.00121	.00078	-.00003	.97956	.03433	.00008	-.00041	.00118	.00041	48.859
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.22396	.00545	.05376	-.00150	-.00073	248.63	.00253	.00093	.00161	4.8035	-.00915	.00361	.03231
Stddev	.03364	.00018	.00284	.00012	.00025	.66	.00101	.00149	.00112	.0026	.00300	.00172	.01707
%RSD	15.022	3.2595	5.2741	7.9031	34.103	.26435	39.804	159.66	69.578	.05398	32.762	47.623	52.839
#1	.24775	.00557	.05176	-.00141	-.00091	249.10	.00182	-.00012	.00241	4.8017	-.01127	.00240	.02024
#2	.20017	.00532	.05577	-.00158	-.00056	248.17	.00324	.00199	.00082	4.8054	-.00703	.00483	.04438
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.06914	-.00340	.00044	4.9475	-.01264	.00335	10.293	.00183	-.00083	-.13200			
Stddev	.03653	.00185	.00001	.0087	.00031	.00158	.007	.00008	.00026	.00305			
%RSD	52.839	54.347	1.6286	.17555	2.4355	47.057	.06668	4.5430	31.243	2.3076			
#1	.04331	-.00209	.00045	4.9414	-.01242	.00446	10.289	.00177	-.00101	-.12985			
#2	.09497	-.00471	.00044	4.9536	-.01285	.00223	10.298	.00189	-.00064	-.13416			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3217.0	53340.	6542.6										
Stddev	.3	450.	93.9										
%RSD	.00810	.84280	1.4353										
#1	3216.8	53022.	6476.2										
#2	3217.2	53658.	6609.0										

Sample Name: CCV-3296664 Acquired: 6/1/2015 12:38:13 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.50371	.53217	.98362	.49617	.49908	.49840	-.00037	5.1473	.49812	.52000	.48724	.49916	2.5409
Stddev	.00234	.00336	.00004	.00094	.00119	.00060	.00361	.0092	.00315	.00282	.00261	.00112	.0132
%RSD	.46448	.63174	.00409	.18864	.23752	.12007	965.97	.17908	.63143	.54169	.53582	.22342	.52121
#1	.50537	.53455	.98359	.49551	.49992	.49797	-.00292	5.1408	.50034	.51801	.48540	.49838	2.5315
#2	.50206	.52980	.98365	.49684	.49824	.49882	.00218	5.1539	.49589	.52199	.48909	.49995	2.5502

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	50.675	1.0100	20.469	.51166	.50213	5.0436	.52125	.99878	1.0107	-.02466	.98170	.96821	5.1593
Stddev	.037	.0020	.021	.00087	.00190	.0052	.00182	.00305	.0024	.00163	.00462	.00576	.0111
%RSD	.07281	.20204	.10127	.17082	.37747	.10292	.34856	.30495	.23567	6.6098	.47094	.59470	.21433
#1	50.649	1.0114	20.484	.51228	.50079	5.0400	.51997	.99663	1.0090	-.02351	.98497	.97228	5.1671
#2	50.701	1.0085	20.455	.51104	.50347	5.0473	.52253	1.0009	1.0124	-.02581	.97843	.96414	5.1515

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	11.041	1.0145	.49833	-.00566	.50470	1.0205	-.01001	.51283	.52365	.50678
Stddev	.024	.0082	.00035	.00071	.00026	.0043	.00741	.00211	.00473	.00421
%RSD	.21433	.80850	.06965	12.564	.05124	.42279	74.037	.41061	.90413	.83074
#1	11.058	1.0087	.49809	-.00515	.50489	1.0236	-.01525	.51432	.52700	.50975
#2	11.024	1.0203	.49858	-.00616	.50452	1.0175	-.00477	.51134	.52031	.50380

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3256.7	54221.	6637.9								
Stddev	2.7	12.	17.0								
%RSD	.08166	.02168	.25536								
#1	3254.9	54229.	6649.9								
#2	3258.6	54213.	6625.9								

Sample Name: CCB Acquired: 6/1/2015 12:40:42 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-.00069	-.00035	-.00174	-.00099	.00034	-.00005	.00180	.00142	-.00017	.00008	-.00003	.00174	.03834
Stddev	.00112	.00036	.00178	.00041	.00020	.00018	.00092	.00130	.00006	.00007	.00014	.00039	.00149
%RSD	161.43	103.58	101.81	41.726	58.960	337.00	51.311	91.813	36.635	85.013	400.79	22.405	3.8831
#1	.00010	-.00009	-.00300	-.00070	.00020	-.00018	.00245	.00050	-.00013	.00013	-.00013	.00202	.03939
#2	-.00148	-.00061	-.00049	-.00129	.00048	.00007	.00115	.00234	-.00022	.00003	.00006	.00146	.03728

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.20539	.00244	.00382	.00121	.00006	-.02597	.00007	-.00926	.00049	-.01776	-.00264	-.00458	.02474
Stddev	.02568	.00029	.00224	.00007	.00042	.01175	.00016	.00124	.00002	.00041	.00114	.00179	.01601
%RSD	12.501	11.760	58.756	5.6962	703.47	45.232	214.36	13.350	3.2205	2.3040	43.272	39.142	64.691
#1	.18723	.00264	.00223	.00126	.00035	-.01766	.00018	-.01013	.00050	-.01747	-.00344	-.00331	.01342
#2	.22354	.00224	.00540	.00116	-.00024	-.03428	-.00004	-.00838	.00048	-.01805	-.00183	-.00585	.03606

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.05295	-.00175	.00014	-.00212	-.00002	-.00063	.02113	-.00062	.00407	-.00423			
Stddev	.03425	.00063	.00000	.00205	.00007	.00182	.00928	.00049	.00009	.00067			
%RSD	64.691	36.143	1.0046	97.028	375.17	290.59	43.916	78.972	2.2741	15.883			
#1	.02873	-.00220	.00014	-.00066	-.00007	.00066	.01457	-.00096	.00401	-.00471			
#2	.07717	-.00130	.00014	-.00357	.00003	-.00191	.02769	-.00027	.00414	-.00376			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3272.3	54795.	6548.1										
Stddev	7.1	608.	22.9										
%RSD	.21679	1.1105	.34930										
#1	3277.3	55225.	6564.3										
#2	3267.3	54365.	6532.0										

Sample Name: CCVL-3302200 Acquired: 6/1/2015 12:47:07 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00952	.11007	.01384	.09567	.01050	.00099	.10259	.21875	.00494	.01066	.00991	.01676
Stddev	.00048	.00027	.00314	.00054	.00024	.00002	.00007	.00012	.00018	.00014	.00011	.00027
%RSD	5.0265	.24927	22.693	.56953	2.2759	2.0241	.06467	.05442	3.6129	1.3373	1.0907	1.5933

#1	.00985	.10988	.01606	.09529	.01033	.00100	.10264	.21866	.00507	.01056	.00998	.01695
#2	.00918	.11027	.01162	.09606	.01067	.00097	.10255	.21883	.00481	.01076	.00983	.01657

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10774	3.3423	F .01402	.22107	.01101	.01977	1.0190	.04244	2.8463	.00921	-.02189	.00735
Stddev	.00215	.0191	.00012	.00912	.00002	.00062	.0090	.00013	.0052	.00063	.00121	.00086
%RSD	1.9986	.57109	.85274	4.1240	.17250	3.1126	.88465	.31018	.18099	6.8809	5.5470	11.661

#1	.10926	3.3558	.01410	.22752	.01099	.02020	1.0253	.04235	2.8499	.00876	-.02275	.00795
#2	.10622	3.3288	.01393	.21462	.01102	.01933	1.0126	.04253	2.8426	.00965	-.02103	.00674

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00937	.50912	1.0895	.09945	.01033	.01385	.00994	.01463	.06713	.00951	.02368	.01186
Stddev	.00318	.01104	.0236	.00006	.00022	.00049	.00015	.00135	.00517	.00045	.00041	.00199
%RSD	33.893	2.1692	2.1692	.06306	2.1786	3.5584	1.5357	9.2299	7.6944	4.6838	1.7518	16.765

#1	.00713	.50131	1.0728	.09940	.01048	.01350	.00983	.01558	.06348	.00920	.02339	.01326
#2	.01162	.51693	1.1062	.09949	.01017	.01419	.01004	.01367	.07078	.00983	.02397	.01045

Check ? Value Range	Chk Fail .01500	Chk Pass										
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3271.7	54631.	6639.0									
Stddev	2.0	212.	6.4									
%RSD	.06056	.38714	.09618									
#1	3273.1	54781.	6643.5									
#2	3270.3	54482.	6634.5									

Sample Name: MB 280-279404/1-A Acquired: 6/1/2015 12:51:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00076	.00560	-.00234	-.00112	.00079	-.00003	-.00115	.01981	.00015
Stddev	.00010	.00028	.00376	.00053	.00009	.00003	.00021	.00130	.00009
%RSD	13.629	4.9875	160.29	47.123	10.781	96.072	18.628	6.5787	61.931
#1	-.00069	.00540	-.00500	-.00149	.00085	-.00005	-.00100	.02074	.00008
#2	-.00083	.00579	.00031	-.00075	.00073	-.00001	-.00130	.01889	.00021
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	-.00010	.00165	.01055	.18740	.00282	.00671	.00027	-.00010
Stddev	.00007	.00009	.00009	.00163	.02932	.00255	.00059	.00003	.00008
%RSD	25.722	91.271	5.4394	15.495	15.645	90.298	8.7296	12.371	76.671
#1	.00021	-.00017	.00159	.00939	.20813	.00102	.00630	.00025	-.00005
#2	.00030	-.00004	.00172	.01170	.16667	.00463	.00712	.00030	-.00016
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03096	-.00005	-.00878	-.00030	-.01756	.00132	-.00373	.01779	.03808
Stddev	.00684	.00025	.00119	.00175	.00340	.00204	.00243	.01536	.03286
%RSD	22.080	551.22	13.494	575.71	19.342	154.03	65.164	86.309	86.309
#1	-.02613	.00013	-.00795	.00093	-.01516	.00276	-.00201	.00693	.01484
#2	-.03580	-.00023	-.00962	-.00154	-.01996	-.00012	-.00545	.02865	.06132
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00160	.00016	-.00161	-.00026	.00073	.01710	-.00042	.00119	-.00322
Stddev	.00003	.00004	.00044	.00032	.00007	.00888	.00033	.00020	.00060
%RSD	2.0616	26.339	27.511	122.25	10.074	51.933	78.409	16.645	18.770
#1	-.00158	.00013	-.00129	-.00004	.00068	.02338	-.00019	.00105	-.00364
#2	-.00162	.00019	-.00192	-.00048	.00078	.01082	-.00066	.00134	-.00279
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3288.7	54949.	6661.6						
Stddev	12.0	67.	3.2						
%RSD	.36577	.12281	.04771						
#1	3280.2	54997.	6663.9						
#2	3297.2	54901.	6659.4						

Sample Name: LCS 280-279404/2-A Acquired: 6/1/2015 12:53:34 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04869	2.0031	.98241	.98134	2.0067	.04963	1.9254	50.173	.09855
#2	.04933	2.0053	.98187	.98963	2.0093	.04968	1.9465	50.138	.09901
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.50095	.18429	.24901	1.0019	51.393	1.0176	50.938	.50676	1.0306
#2	.50004	.18608	.24993	.99788	51.362	1.0194	50.951	.50484	1.0276
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	51.833	.50115	10.034	.49787	1.9428	.49380	1.9341	10.248	21.932
#2	51.920	.50113	10.097	.49951	1.9504	.49770	1.9461	10.188	21.801
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0002	.99785	.99625	1.0084	1.9550	2.0168	.50707	.51570	.48079
#2	1.9954	.99980	.99195	1.0053	1.9699	2.0873	.50305	.51090	.47649
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3145.7	52728.	6577.5						
#2	3178.5	52977.	6651.8						

Sample Name: 280-69589-C-2-A Acquired: 6/1/2015 12:55:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00080	As1890 ppm .15397	B_2089 ppm .00103	Ba4554 ppm .04431	Be3130 ppm .19824	Bi2230 ppm -.00002	Ca3179 ppm -.00096	Cd2288 ppm 89.894
#1	-.00075	.15533	-.00345	.04456	.19903	-.00003	-.00151	90.098	-.00013
#2	-.00085	.15261	.00139	.04406	.19745	-.00001	-.00042	89.691	.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00018	Cu3247 ppm .00338	Fe2599 ppm .00259	K_7664 ppm .11202	Li6707 ppm 1.2638	Mg2790 ppm .02560	Mn2576 ppm 9.9332	Mo2020 ppm .00990
#1	.00009	.00327	.00274	.11266	1.2488	.02595	9.8978	.00989	-.00149
#2	.00028	.00349	.00244	.11138	1.2788	.02524	9.9687	.00992	-.00134
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 59.403	P_1782 ppm .00312	Pb2203 ppm .00733	S_1820 ppm .00236	Sb2068 ppm 7.9070	Se1960 ppm -.00182	Si2881 ppm 12.675	SiO2 ppm 27.124
#1	59.446	.00312	.00505	.00380	7.9386	-.00309	-.00193	12.640	27.049
#2	59.360	.00311	.00960	.00092	7.8754	-.00055	-.00418	12.710	27.199
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00080	Th2837 ppm .72628	Ti3349 ppm -.00034	Tl1908 ppm .00146	U_3701 ppm -.00751	V_2924 ppm -.01419	Zn2062 ppm .00730	Zr3391 ppm .00165
#1	.00063	.72750	.00078	.00140	-.00777	-.04711	.00741	.00159	-.00337
#2	.00096	.72506	-.00146	.00151	-.00725	.01872	.00719	.00171	-.00198
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3209.5	Y_3774 Cts/S 53404.	377.433 {89}					
#1	3201.8	53352.	6580.9						
#2	3217.3	53456.	6608.9						

Sample Name: 280-69589-C-2-A SD@5 Acquired: 6/1/2015 12:58:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00072	As1890 ppm .03493	B_2089 ppm .00049	Ba4554 ppm .00822	Be3130 ppm .04523	Bi2230 ppm -.00004	Ca3179 ppm .00015	Cd2288 ppm 20.137
#1	-.00091	.03544	.00330	.00869	.04510	-.00008	.00195	20.130	-.00021
#2	-.00052	.03443	-.00232	.00776	.04536	.00001	-.00166	20.144	.00024
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00008	Cu3247 ppm .00069	Fe2599 ppm .00215	K_7664 ppm .03260	Li6707 ppm .42704	Mg2790 ppm .00723	Mn2576 ppm 2.2506	Mo2020 ppm .00235
#1	.00000	.00075	.00245	.03155	.42084	.00718	2.2513	.00233	-.00079
#2	-.00016	.00063	.00185	.03365	.43324	.00727	2.2500	.00238	-.00098
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 13.179	P_1782 ppm .00160	Pb2203 ppm -.00526	S_1820 ppm .00094	Sb2068 ppm 1.6484	Se1960 ppm -.00130	Si2881 ppm W -.00590	SiO2 ppm 2.8775
#1	12.996	.00132	-.00243	.00173	1.6776	.00000	-.00551	2.8544	6.1085
#2	13.361	.00188	-.00809	.00015	1.6192	-.00260	-.00629	2.9006	6.2073
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00518	Th2837 ppm .16275	Ti3349 ppm .00015	Tl1908 ppm -.00009	U_3701 ppm -.00199	V_2924 ppm -.00323	Zn2062 ppm .00128	Zr3391 ppm .00049
#1	.00582	.16243	-.00107	-.00031	-.00255	-.00785	.00132	.00074	-.00398
#2	.00454	.16308	.00138	.00014	-.00143	.00138	.00124	.00025	-.00438
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3254.8	Y_3774 Cts/S 53989.	377.433 {89}					
#1	3254.6	54180.	6496.5						
#2	3255.1	53799.	6503.2						

Sample Name: 280-69589-C-2-B MS Acquired: 6/1/2015 13:01:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05188	2.2104	W 2.5141	1.0111	1.0651	2.2524	.05124	F 2.0010	140.36
Stddev	.00024	.0032	.0200	.0068	.0014	.0006	.00007	.0042	.13
%RSD	.45344	.14386	.79396	.67367	.13419	.02555	.12863	.21077	.09554
#1	.05171	2.2127	2.5000	1.0063	1.0641	2.2528	.05129	2.0039	140.46
#2	.05205	2.2082	2.5282	1.0159	1.0661	2.2520	.05119	1.9980	140.27
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10205	.50509	W .18922	.26162	1.1840	54.274	1.0700	61.037	.52121
Stddev	.00048	.00233	.00148	.00017	.0061	.065	.0031	.049	.00149
%RSD	.46768	.46195	.78105	.06550	.51283	.12037	.28738	.08085	.28622
#1	.10238	.50674	.19026	.26174	1.1797	54.320	1.0721	61.072	.52227
#2	.10171	.50344	.18817	.26150	1.1883	54.228	1.0678	61.002	.52016
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0550	112.82	.51017	W 10.566	.50129	10.096	.51658	2.0197	23.540
Stddev	.0038	1.01	.00271	.021	.00333	.049	.00822	.0202	.019
%RSD	.35856	.89877	.53078	.19721	.66529	.48230	1.5904	1.0007	.07889
#1	1.0577	113.53	.51208	10.581	.50365	10.130	.52239	2.0340	23.526
#2	1.0524	112.10	.50825	10.551	.49893	10.061	.51077	2.0054	23.553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.375	W 2.0335	1.7559	1.0262	1.0345	1.9628	2.1089	.52448	.51461
Stddev	.040	.0252	.0001	.0002	.0028	.0165	.0346	.00089	.00222
%RSD	.07889	1.2394	.00755	.01755	.26869	.84072	1.6413	.17035	.43131
#1	50.347	2.0513	1.7560	1.0263	1.0365	1.9745	2.1334	.52511	.51618
#2	50.403	2.0157	1.7558	1.0261	1.0325	1.9512	2.0844	.52385	.51304
Check ?	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.49885								
Stddev	.00057								
%RSD	.11353								
#1	.49845								
#2	.49925								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69589-C-2-B MS Acquired: 6/1/2015 13:01:19 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279404 6010C Q5 (Ca Fe K Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3123.4	52601.	6565.5
Stddev	3.2	305.	31.5
%RSD	.10114	.58051	.48007
#1	3125.6	52385.	6543.2
#2	3121.2	52817.	6587.7

Sample Name: 280-69589-C-2-C MSD Acquired: 6/1/2015 13:03:44 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}
#1	.04919	2.1371	2.4219	.97628	1.0234	2.1535	.04884	1.9212	135.30
#2	.04890	2.1267	2.3982	.97893	1.0217	2.1591	.04918	1.9230	135.70
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}	Mn2576 257.610 {131}
#1	.09795	.48755	.18183	.24583	1.0868	51.757	1.0217	58.455	.50221
#2	.09818	.48450	.18371	.24986	1.0929	52.027	1.0291	58.784	.50062
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}
#1	1.0174	107.62	.48873	10.121	.48359	9.7738	.49762	1.9347	22.782
#2	1.0151	107.67	.48593	10.078	.48256	9.7928	.49788	1.9527	22.865
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}
#1	48.753	1.9653	1.6889	.98844	.99450	1.8877	2.0278	.50623	.49569
#2	48.932	1.9599	1.6932	.98085	.99443	1.8944	2.0588	.50507	.49580
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 {99}								
#1	.46995								
#2	.47490								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69589-C-2-C MSD Acquired: 6/1/2015 13:03:44 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279404 6010C Q5 (Ca Fe K Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3123.8	52592.	6596.4
Stddev	14.9	422.	2.6
%RSD	.47638	.80175	.03981
#1	3113.3	52294.	6594.5
#2	3134.3	52890.	6598.2

Sample Name: 280-69589-C-2-A PDS Acquired: 6/1/2015 13:06:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279404 6010C Q5 (Ca Fe K Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04847	1.1452	.19601	.14286	.29350	.04986	.00239	107.68	.05074
Stddev	.00018	.0005	.00033	.00005	.00121	.00063	.00066	.61	.00002
%RSD	.37372	.04646	.16634	.03315	.41190	1.2676	27.707	.57028	.03075
#1	.04860	1.1448	.19578	.14283	.29265	.04941	.00192	107.24	.05075
#2	.04835	1.1456	.19624	.14289	.29436	.05030	.00286	108.11	.05073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05012	.04970	.05153	1.0874	21.423	.12519	29.375	.05947	.04853
Stddev	.00006	.00050	.00017	.0217	.126	.00062	.024	.00021	.00015
%RSD	.10994	1.0030	.32431	1.9962	.58611	.49750	.07999	.35552	.31292
#1	.05008	.04935	.05165	1.0721	21.334	.12475	29.392	.05962	.04864
#2	.05016	.05005	.05141	1.1028	21.512	.12563	29.358	.05932	.04842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.352	.05304	W 2.0476	.10139	7.9655	.09714	.19059	17.812	38.119
Stddev	1.093	.00026	.0045	.00024	.0042	.00357	.00090	.296	.634
%RSD	1.3598	.48970	.21817	.24151	.05298	3.6759	.47419	1.6634	1.6634
#1	79.580	.05323	2.0508	.10122	7.9626	.09966	.18995	17.603	37.670
#2	81.125	.05286	2.0445	.10157	7.9685	.09461	.19123	18.022	38.567
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09885	.76324	.20003	.05157	.19502	.48364	.05831	.21361	.04169
Stddev	.00242	.00347	.00188	.00055	.00618	.00146	.00094	.00376	.00039
%RSD	2.4475	.45507	.94192	1.0724	3.1704	.30248	1.6144	1.7596	.92536
#1	.09714	.76079	.20137	.05196	.19939	.48260	.05897	.21627	.04142
#2	.10056	.76570	.19870	.05118	.19065	.48467	.05764	.21096	.04197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3146.1	52667.	6569.6						
Stddev	4.1	114.	87.3						
%RSD	.12933	.21715	1.3290						
#1	3143.3	52586.	6631.3						
#2	3149.0	52748.	6507.8						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 13:08:41 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00246	Al3092 ppm 49.749	As1890 ppm .00026	B_2089 ppm .00043	Ba4554 ppm .00083	Be3130 ppm -.00004	Bi2230 ppm .99127	Ca3179 ppm .04191	Cd2288 ppm -.00032	Co2286 ppm -.00052	Cr2055 ppm .00082	Cu3247 ppm .00098	Fe2714 ppm 50.153
#1	.00247	49.670	-.00360	.00065	.00069	-.00002	.98744	.04534	-.00020	-.00053	.00090	.00093	49.988
#2	.00245	49.827	.00411	.00020	.00098	-.00007	.99510	.03849	-.00044	-.00050	.00074	.00103	50.317
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .23760	Li6707 ppm .00330	Mg2790 ppm .04870	Mn2576 ppm -.00148	Mo2020 ppm -.00083	Na8183 ppm 251.83	Ni2316 ppm .00264	P_1782 ppm -.00451	Pb2203 ppm .00121	S_1820 ppm 4.8665	Sb2068 ppm -.00741	Se1960 ppm .00390	Si2881 ppm -.00556
#1	.21987	.00348	.05077	-.00149	-.00108	250.95	.00239	-.00340	.00112	4.8464	-.00744	.00321	-.00160
#2	.25532	.00312	.04664	-.00147	-.00059	252.71	.00289	-.00563	.00130	4.8865	-.00738	.00459	-.00953
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units Avg Stddev %RSD	SiO2 ppm -.01191	Sn1899 ppm -.00363	Sr4077 ppm .00045	Th2837 ppm 4.9537	Ti3349 ppm -.01288	TI1908 ppm .00318	U_3701 ppm 10.331	V_2924 ppm .00237	Zn2062 ppm -.00007	Zr3391 ppm -.12419			
#1	-.00342	-.00370	.00036	4.9460	-.01277	.00399	10.404	.00294	-.00004	-.12549			
#2	-.02039	-.00355	.00055	4.9614	-.01300	.00237	10.257	.00180	-.00011	-.12290			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3203.5	Y_3600 Cts/S 53543.	Y_3774 Cts/S 6623.6										
#1	3202.6	53633.	6623.3										
#2	3204.4	53452.	6623.9										

Sample Name: CCV-3296664 Acquired: 6/1/2015 13:11:20 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49816	.53022	.98318	.49115	.50279	.50067	.00045	5.1705	.49217	.52430	.48801	.49632	2.5405
Stddev	.00569	.00122	.00520	.00337	.00206	.00184	.00065	.0227	.00173	.00121	.00037	.00904	.0070
%RSD	1.1422	.22992	.52909	.68712	.40907	.36710	142.71	.43805	.35169	.23109	.07572	1.8210	.27425
#1	.50218	.53108	.98686	.49354	.50133	.49937	.00091	5.1545	.49340	.52344	.48775	.50271	2.5356
#2	.49413	.52936	.97950	.48877	.50424	.50197	.00000	5.1865	.49095	.52515	.48827	.48993	2.5455

Check ?	Chk Pass	None	Chk Pass										
Value Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.024	1.0235	20.404	.50923	.50676	5.1191	.52632	.99220	1.0152	-.02235	.97588	.96472	5.1764
Stddev	.120	.0008	.155	.00029	.00207	.0132	.00123	.00290	.0034	.00142	.00400	.00265	.0364
%RSD	.23544	.07678	.75758	.05628	.40901	.25826	.23456	.29224	.33021	6.3326	.40971	.27456	.70340
#1	50.940	1.0229	20.513	.50903	.50529	5.1098	.52545	.99015	1.0128	-.02335	.97871	.96659	5.1507
#2	51.109	1.0240	20.295	.50944	.50822	5.1285	.52720	.99425	1.0175	-.02135	.97305	.96285	5.2022

Check ?	Chk Pass												
Value Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	11.078	1.0170	.50112	-.00453	.50648	1.0218	-.02756	.50920	.52496	.50966			
Stddev	.078	.0004	.00212	.00185	.00633	.0001	.02032	.00027	.00804	.00563			
%RSD	.70340	.04107	.42322	40.915	1.2494	.01452	73.730	.05235	1.5314	1.1042			
#1	11.023	1.0173	.49962	-.00322	.51096	1.0219	-.04193	.50902	.51928	.50568			
#2	11.133	1.0167	.50262	-.00584	.50201	1.0217	-.01319	.50939	.53065	.51364			

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass					
Value Range													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	3228.3	53780.	6597.0										
Stddev	1.3	355.	58.1										
%RSD	.04181	.65970	.88066										
#1	3229.2	54031.	6638.1										
#2	3227.3	53529.	6555.9										

Sample Name: CCB Acquired: 6/1/2015 13:13:50 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date: Custom ID2: Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	-0.0064	-0.0036	-0.0034	-0.0074	.00022	-0.0001	.00040	.00677	-0.0007	.00025	-0.0006	.00188	.00065
Stddev	.00035	.00016	.00142	.00027	.00043	.00009	.00253	.00076	.00004	.00004	.00041	.00056	.00187
%RSD	54.561	44.672	42.683	36.599	195.82	881.68	625.93	11.190	59.954	15.199	706.21	29.967	288.76

#1	-.00040	-.00025	-.00434	-.00055	.00052	.00005	.00219	.00623	-.00004	.00023	.00023	.00228	-.00067
#2	-.00089	-.00048	-.00233	-.00093	-.00008	-.00007	-.00138	.00731	-.00011	.00028	-.00035	.00148	.00197

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.17719	.00341	.00287	.00004	-.00023	-.00807	.00028	-.00648	.00014	-.02284	-.00014	-.00443	.01671
Stddev	.01608	.00027	.00024	.00004	.00023	.00347	.00009	.00197	.00000	.00002	.00058	.00641	.00795
%RSD	9.0756	7.7798	8.4433	93.740	101.10	43.028	30.794	30.359	2.8467	.09815	409.33	144.62	47.551
#1	.18856	.00360	.00270	.00007	-.00006	-.01053	.00022	-.00787	.00014	-.02286	.00027	.00010	.02233
#2	.16582	.00322	.00304	.00001	-.00039	-.00562	.00034	-.00509	.00014	-.02283	-.00055	-.00896	.01109

Check ? High Limit Low Limit	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.03576	-.00164	.00010	-.00222	-.00052	-.00001	.01903	-.00110	-.00052	-.00359
Stddev	.01701	.00052	.00001	.00226	.00014	.00153	.02383	.00011	.00008	.00142
%RSD	47.551	31.525	5.3037	101.39	26.128	11320.	125.20	9.7393	16.208	39.445
#1	.04779	-.00128	.00010	-.00382	-.00062	.00107	.03588	-.00118	-.00058	-.00259
#2	.02374	-.00201	.00011	-.00063	-.00043	-.00109	.00218	-.00103	-.00046	-.00459

Check ? High Limit Low Limit	Chk Pass									
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3289.3	55403.	6535.4
Stddev	8.1	89.	31.0
%RSD	.24658	.16012	.47396
#1	3295.0	55465.	6513.5
#2	3283.6	55340.	6557.4

Sample Name: CCVL-3302200 Acquired: 6/1/2015 13:16:13 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00933	.11057	.01197	.09742	.01085	.00097	.10362	.22475	.00526	.01120	.01024	.01732
Stddev	.00057	.00018	.00056	.00115	.00015	.00003	.00132	.00360	.00005	.00061	.00009	.00051
%RSD	6.1136	.15908	4.6754	1.1779	1.3751	2.9761	1.2717	1.5999	.85566	5.4727	.91916	2.9655
#1	.00973	.11070	.01236	.09823	.01074	.00099	.10455	.22221	.00523	.01077	.01030	.01696
#2	.00892	.11045	.01157	.09661	.01096	.00095	.10269	.22729	.00530	.01163	.01017	.01768

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10757	3.4682	.01261	.22027	.01074	.01917	1.0854	.04306	2.8577	.00960	-.02052	.00951
Stddev	.00064	.0219	.00102	.00055	.00000	.00004	.0312	.00096	.0079	.00117	.00071	.00160
%RSD	.59700	.63195	8.1230	.25039	.03251	.19357	2.8781	2.2353	.27774	12.173	3.4621	16.877
#1	.10712	3.4527	.01334	.21988	.01074	.01919	1.0633	.04374	2.8633	.01042	-.02103	.00837
#2	.10802	3.4837	.01189	.22066	.01073	.01914	1.1075	.04238	2.8521	.00877	-.02002	.01064

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00941	.52387	1.1211	.10090	.01080	.01385	.00960	.01608	.06990	.00984	.02323	.01139
Stddev	.00121	.00863	.0185	.00071	.00020	.00081	.00019	.00022	.00765	.00008	.00076	.00024
%RSD	12.813	1.6468	1.6468	.69878	1.8172	5.8464	1.9809	1.3472	10.943	.85419	3.2826	2.0882
#1	.00856	.52997	1.1341	.10040	.01066	.01328	.00946	.01593	.07531	.00978	.02269	.01122
#2	.01026	.51777	1.1080	.10140	.01094	.01442	.00973	.01624	.06449	.00990	.02377	.01156

Check ? Value Range	Chk Fail .01500 -30.000%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3293.9	55061.	6595.5									
Stddev	.9	400.	87.1									
%RSD	.02730	.72667	1.3202									
#1	3294.5	54778.	6534.0									
#2	3293.3	55344.	6657.1									

Sample Name: MB 280-279405/1-A Acquired: 6/1/2015 13:23:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279405 6010C Q4 (Ca Fe K Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00097	.00285	-.00273	-.00037	.00008	-.00004	-.00331	.01791	-.00001
Stddev	.00069	.00006	.00200	.00021	.00004	.00000	.00169	.00217	.00004
%RSD	70.912	2.1047	73.071	57.896	43.151	11.222	51.150	12.128	476.34
#1	-.00146	.00281	-.00415	-.00022	.00006	-.00004	-.00451	.01944	-.00004
#2	-.00049	.00290	-.00132	-.00052	.00011	-.00004	-.00211	.01637	.00002
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	.00010	.00134	.00448	.13848	.00345	.00460	.00016	-.00027
Stddev	.00047	.00005	.00033	.00234	.00830	.00173	.00284	.00008	.00003
%RSD	272.57	48.261	24.849	52.160	5.9958	50.157	61.750	48.736	9.8257
#1	.00016	.00014	.00157	.00283	.13261	.00468	.00259	.00010	-.00026
#2	-.00051	.00007	.00110	.00613	.14435	.00223	.00661	.00021	-.00029
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02507	-.00045	-.00593	-.00137	-.02112	-.00280	-.00403	.00947	.02027
Stddev	.00633	.00075	.00055	.00086	.00067	.00112	.00298	.00392	.00840
%RSD	25.252	168.87	9.3154	62.718	3.1865	39.960	73.845	41.421	41.421
#1	-.02954	.00009	-.00554	-.00076	-.02160	-.00201	-.00193	.00670	.01433
#2	-.02059	-.00098	-.00632	-.00197	-.02065	-.00359	-.00613	.01225	.02621
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00037	.00015	-.00162	-.00041	.00118	.00454	-.00037	-.00001	-.00370
Stddev	.00002	.00011	.00150	.00017	.00122	.01990	.00026	.00010	.00211
%RSD	5.6628	76.866	92.738	40.958	103.68	438.12	69.172	654.82	57.053
#1	-.00035	.00007	-.00269	-.00029	.00204	.01862	-.00055	-.00008	-.00221
#2	-.00038	.00022	-.00056	-.00053	.00031	-.00953	-.00019	.00005	-.00519
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3323.5	55657.	6672.9						
Stddev	7.3	226.	12.6						
%RSD	.22021	.40558	.18933						
#1	3318.3	55816.	6663.9						
#2	3328.7	55497.	6681.8						

Sample Name: LCS 280-279405/2-A Acquired: 6/1/2015 13:25:33 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4 (Ca Fe K Na)

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04926	2.0201	.99631	.99295	2.0700	.05092	1.9746	51.595	.10008
Stddev	.00025	.0001	.00194	.00183	.0032	.00014	.0054	.180	.00034
%RSD	.50153	.00284	.19425	.18409	.15384	.26930	.27486	.34887	.34293
#1	.04909	2.0201	.99494	.99165	2.0723	.05102	1.9707	51.722	.10033
#2	.04944	2.0201	.99768	.99424	2.0678	.05082	1.9784	51.468	.09984
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50944	F .19036	.25575	1.0237	52.789	1.0481	51.827	.50872	1.0484
Stddev	.00045	.00047	.00063	.0119	.135	.0019	.042	.00069	.0032
%RSD	.08801	.24679	.24645	1.1588	.25586	.18417	.08076	.13634	.30120
#1	.50912	.19003	.25530	1.0321	52.885	1.0495	51.857	.50921	1.0506
#2	.50975	.19069	.25619	1.0153	52.694	1.0468	51.798	.50822	1.0461
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.306	.50973	10.164	.50814	1.9950	.50587	2.0004	10.537	22.549
Stddev	.205	.00059	.008	.0026	.0136	.00224	.0246	.029	.063
%RSD	.38377	.11561	.08273	.05050	.68112	.44330	1.2279	.27972	.27972
#1	53.451	.51014	10.170	.50832	1.9854	.50429	1.9830	10.558	22.593
#2	53.161	.50931	10.158	.50796	2.0046	.50746	2.0178	10.516	22.504
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0487	1.0271	1.0108	1.0143	2.0273	2.0992	.50802	.51274	.50025
Stddev	.0245	.0022	.0024	.0025	.0206	.0002	.00364	.00613	.00550
%RSD	1.1954	.21184	.23267	.24566	1.0165	.00766	.71667	1.1955	1.0989
#1	2.0314	1.0286	1.0091	1.0160	2.0127	2.0991	.51060	.51708	.50414
#2	2.0660	1.0255	1.0124	1.0125	2.0419	2.0994	.50545	.50841	.49637
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3189.9	53503.	6579.2						
Stddev	.6	81.	62.9						
%RSD	.01813	.15058	.95580						
#1	3189.5	53560.	6534.7						
#2	3190.3	53446.	6623.6						

Sample Name: LCSD 280-279405/3-A Acquired: 6/1/2015 13:27:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4 (Ca Fe K Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.05053	2.0355	1.0065	1.0032	2.1130	.05226	1.9992	52.814	.10117
#2	.05105	2.0457	1.0119	1.0089	2.1122	.05221	2.0112	52.655	.10159
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.51932	.19312	.26358	1.0342	53.782	1.0680	52.869	.51447	1.0665
#2	.51948	.19283	.26312	1.0432	53.790	1.0682	52.841	.51613	1.0699
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	53.387	.51860	10.211	.51641	2.0334	.50992	2.0189	10.571	22.621
#2	55.078	.51822	10.277	.52074	2.0489	.51721	2.0513	10.789	23.088
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0748	1.0470	1.0250	1.0305	2.0465	2.1116	.51371	.51923	.50405
#2	2.1041	1.0470	1.0270	1.0289	2.0756	2.1536	.51384	.52362	.51409
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3200.4	53722.	6469.2						
#2	3189.0	53585.	6569.0						

Sample Name: 280-69768-C-11-B Acquired: 6/1/2015 13:30:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4 (Ca Fe K Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00041	As1890 ppm .00312	B_2089 ppm .00304	Ba4554 ppm .00154	Be3130 ppm .00079	Bi2230 ppm .00005	Ca3179 ppm .03764	Cd2288 ppm -.00003
#1	-.00048	.00306	-.00437	.00185	.00096	-.00006	.00312	.03577	-.00004
#2	-.00033	.00319	-.00170	.00123	.00061	-.00004	-.00156	.03951	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00008	Cu3247 ppm .00025	Fe2599 ppm .02472	K_7664 ppm .00966	Li6707 ppm .22061	Mg2790 ppm .00244	Mn2576 ppm .00828	Mo2020 ppm .00061
#1	.00018	.00034	.02448	.00888	.26416	.00255	.00961	.00060	.00044
#2	-.00034	.00017	.02497	.01045	.17706	.00234	.00694	.00061	.00008
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .00254	P_1782 ppm .00040	Pb2203 ppm .00669	S_1820 ppm .00071	Sb2068 ppm .01322	Se1960 ppm .00180	Si2881 ppm .00457	SiO2 ppm .15960
#1	-.00317	.00030	-.00872	.00119	-.01443	-.00267	-.00290	.16106	.34467
#2	-.00191	.00051	-.00466	.00024	-.01201	-.00093	-.00623	.15814	.33843
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00172	Th2837 ppm .00021	Ti3349 ppm .00223	Tl1908 ppm .00011	U_3701 ppm .00098	V_2924 ppm .01296	Zn2062 ppm .00104	Zr3391 ppm .00379
#1	-.00184	.00015	-.00351	-.00012	-.00125	.02018	-.00083	.00416	-.00254
#2	-.00160	.00028	-.00095	-.00011	-.00071	.00575	-.00124	.00341	-.00254
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3324.5	Y_3774 Cts/S 55759.	377.433 {89}					
#1	3322.3	55512.	6587.9						
#2	3326.7	56005.	6592.4						

Sample Name: 280-69768-C-11-BSD@5 Acquired: 6/1/2015 13:32:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4 (Ca Fe K Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0063	.00010	-.00409	.00009	.00050	-0.0005	-.00150	.01075	.00016
Stddev	.00003	.00013	.00001	.00039	.00008	.00006	.00011	.00219	.00018
%RSD	4.8081	139.68	.23258	429.84	15.095	117.12	7.2914	20.403	116.96
#1	-.00061	.00019	-.00409	.00036	.00055	-.00009	-.00157	.00920	.00029
#2	-.00065	.00000	-.00410	-.00018	.00045	-.00001	-.00142	.01230	.00003
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	-.00008	.00680	.00709	.13356	.00331	-.00407	.00026	.00018
Stddev	.00017	.00042	.00022	.00117	.04460	.00006	.00297	.00005	.00025
%RSD	81.016	513.69	3.1858	16.511	33.394	1.8598	73.110	20.412	134.00
#1	.00032	.00022	.00696	.00791	.10202	.00335	-.00196	.00030	.00036
#2	.00009	-.00038	.00665	.00626	.16510	.00327	-.00617	.00023	.00001
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00046	-.00918	.00108	-.01816	.00276	-.00338	.04244	.09083
Stddev	.00529	.00017	.00051	.00189	.00167	.00151	.00318	.00313	.00670
%RSD	2236.4	36.316	5.5018	175.00	9.1803	54.579	94.118	7.3802	7.3802
#1	-.00350	.00034	-.00954	.00242	-.01698	-.00169	-.00563	.04023	.08609
#2	.00398	.00058	-.00883	-.00026	-.01934	-.00382	-.00113	.04466	.09557
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00377	.00015	.00007	-.00053	-.00029	-.01884	-.00063	.00036	-.00391
Stddev	.00015	.00000	.00136	.00005	.00136	.00240	.00023	.00029	.00228
%RSD	4.0526	2.0612	2081.4	9.0822	472.92	12.725	37.501	78.924	58.228
#1	.00388	.00015	.00103	-.00056	-.00125	-.01714	-.00079	.00056	-.00552
#2	.00366	.00014	-.00090	-.00049	.00068	-.02053	-.00046	.00016	-.00230
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units									
Avg	3290.6	55318.	6591.8						
Stddev	6.8	100.	83.6						
%RSD	.20714	.18095	1.2682						
#1	3285.8	55388.	6650.9						
#2	3295.4	55247.	6532.7						

Sample Name: 280-69768-C-11-B PDS Acquired: 6/1/2015 13:35:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279405 6010C Q4 (Ca Fe K Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04873	1.0314	.19317	.09857	.10338	.05052	-.00066	20.151	.05041
Stddev	.00004	.0007	.00151	.00000	.00017	.00003	.00002	.005	.00065
%RSD	.07443	.07136	.78310	.00170	.16442	.06290	2.5148	.02335	1.2815
#1	.04871	1.0309	.19210	.09857	.10350	.05054	-.00065	20.147	.04996
#2	.04876	1.0319	.19424	.09857	.10326	.05050	-.00067	20.154	.05087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05171	.04870	.07459	1.0219	.20510	.10507	20.279	.05092	.05050
Stddev	.00015	.00009	.00031	.0036	.039	.00131	.099	.00033	.00007
%RSD	.28462	.18599	.41521	.35272	.19023	1.2496	.48786	.64925	.14727
#1	.05181	.04863	.07437	1.0245	20.538	.10600	20.209	.05115	.05045
#2	.05160	.04876	.07481	1.0194	20.483	.10414	20.349	.05068	.05056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.387	.05340	1.9669	.10360	-.01606	.09823	.19096	5.2856	11.311
Stddev	.184	.00057	.0124	.00148	.00618	.00104	.00271	.0414	.089
%RSD	.90021	1.0738	.62844	1.4286	38.493	1.0597	1.4178	.78323	.78323
#1	20.516	.05300	1.9582	.10255	-.01169	.09749	.18904	5.3148	11.374
#2	20.257	.05381	1.9756	.10464	-.02044	.09896	.19287	5.2563	11.248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10169	.05150	.19794	.05002	.20619	.48722	.04922	.21495	.04333
Stddev	.00079	.00005	.00037	.00003	.00153	.02666	.00030	.00045	.00169
%RSD	.77472	.09578	.18913	.05026	.73995	5.4722	.61422	.20783	3.9016
#1	.10225	.05154	.19820	.05001	.20727	.46837	.04901	.21527	.04453
#2	.10113	.05147	.19767	.05004	.20511	.50607	.04943	.21464	.04214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3266.2	54490.	6602.4						
Stddev	3.1	274.	10.0						
%RSD	.09362	.50335	.15107						
#1	3268.4	54296.	6595.3						
#2	3264.1	54684.	6609.4						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 13:37:42 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00261	49.907	-.00280	-.00013	.00091	.00007	.99116	.03944	-.00005	-.00043	.00075	.00217	49.678
Stddev	.00063	.147	.00273	.00004	.00021	.00007	.00413	.00382	.00016	.00038	.00014	.00045	.519
%RSD	24.119	.29371	97.471	32.699	22.927	102.40	.41695	9.6737	328.25	89.369	18.420	20.625	1.0456
#1	.00305	49.804	-.00087	-.00010	.00106	.00002	.99409	.03675	.00006	-.00016	.00065	.00185	49.311
#2	.00216	50.011	-.00473	-.00016	.00076	.00011	.98824	.04214	-.00016	-.00070	.00085	.00248	50.046

Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.21534	.00353	.04551	-.00109	-.00059	253.39	.00292	-.00383	.00086	4.8609	-.01132	-.00026	-.01560
Stddev	.06663	.00006	.00485	.00004	.00043	1.98	.00003	.00284	.00003	.0126	.00119	.00189	.00932
%RSD	30.940	1.6560	10.647	3.8401	73.169	.78059	1.1879	74.265	3.5639	.25975	10.501	734.54	59.712
#1	.16823	.00349	.04893	-.00106	-.00089	251.99	.00289	-.00182	.00084	4.8699	-.01216	.00108	-.00901
#2	.26246	.00357	.04208	-.00112	-.00028	254.79	.00294	-.00584	.00088	4.8520	-.01048	-.00159	-.02219

Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	-.03338	-.00395	.00052	4.9562	-.01344	.00216	10.287	.00259	.00006	-.12510
Stddev	.01993	.00081	.00004	.0006	.00034	.00058	.230	.00041	.00007	.00392
%RSD	59.712	20.499	7.6786	.01317	2.5490	26.726	2.2351	15.647	116.79	3.1336
#1	-.01929	-.00337	.00054	4.9558	-.01368	.00175	10.125	.00230	.00001	-.12788
#2	-.04748	-.00452	.00049	4.9567	-.01320	.00256	10.450	.00288	.00011	-.12233

Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3196.6	52941.	6445.1
Stddev	8.4	84.	68.8
%RSD	.26182		.15866
#1	3202.5		52881.
#2	3190.7		6493.8
	53000.		6396.5

Sample Name: CCV-3296664 Acquired: 6/1/2015 13:40:19 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.49582	.52913	.98415	.48964	.51158	.50849	-.00197	5.2911	.49045	.52927	.49302	.50454	2.5677
Stddev	.00091	.00302	.00737	.00479	.00205	.00074	.00006	.0204	.00245	.00116	.00122	.00121	.0034
%RSD	.18364	.57092	.74883	.97869	.40039	.14496	2.9595	.38504	.50028	.21960	.24653	.23952	.13049
#1	.49646	.53126	.98936	.49303	.51303	.50901	-.00201	5.3055	.49218	.53009	.49388	.50540	2.5701
#2	.49518	.52699	.97894	.48625	.51013	.50797	-.00193	5.2767	.48871	.52845	.49216	.50369	2.5654

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	51.842	1.0324	20.800	.50701	.50904	5.1431	.52890	.98753	1.0324	-.01876	.98521	.97361	5.2243
Stddev	.035	.0019	.011	.00105	.00019	.0145	.00259	.00826	.0023	.00008	.00669	.00203	.0285
%RSD	.06842	.18922	.05204	.20698	.03811	.28184	.48884	.83612	.22702	.42297	.67943	.20818	.54525
#1	51.817	1.0310	20.792	.50627	.50918	5.1534	.53073	.98169	1.0340	-.01871	.98995	.97218	5.2445
#2	51.867	1.0338	20.808	.50775	.50890	5.1329	.52707	.99336	1.0307	-.01882	.98048	.97505	5.2042

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	11.180	1.0326	.50767	-.00592	.50189	1.0360	-.02266	.50344	.52529	.51846
Stddev	.061	.0023	.00047	.00211	.00014	.0040	.00026	.00070	.00002	.00046
%RSD	.54525	.22646	.09236	35.656	.02716	.38837	1.1350	.13844	.00301	.08888
#1	11.223	1.0309	.50800	-.00442	.50179	1.0389	-.02284	.50294	.52528	.51878
#2	11.137	1.0342	.50734	-.00741	.50199	1.0332	-.02247	.50393	.52531	.51813

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3249.2	54006.	6405.7									
Stddev	3.7	5.	56.8									
%RSD	.11292	.00926	.88718									
#1	3251.8	54009.	6365.5									
#2	3246.7	54002.	6445.9									

Sample Name: CCB Acquired: 6/1/2015 13:42:48 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00090	Al1670 ppm -.00025	As1890 ppm -.00159	B_2089 ppm -.00029	Ba4554 ppm .00019	Be3130 ppm -.00010	Bi2230 ppm .00015	Ca3179 ppm .00699	Cd2288 ppm -.00019	Co2286 ppm .00042	Cr2055 ppm .00002	Cu3247 ppm .00179	Fe2599 ppm .00063
#1	-.00096	-.00042	-.00418	-.00040	.00037	-.00012	.00080	.00689	-.00019	.00064	-.00007	.00170	-.00008
#2	-.00084	-.00007	.00099	-.00017	.00002	-.00009	-.00049	.00709	-.00018	.00020	.00011	.00188	.00133
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .22507	Li6707 ppm .00057	Mg2790 ppm .00129	Mn2576 ppm .00011	Mo2020 ppm .00015	Na5895 ppm -.00835	Ni2316 ppm .00055	P_1782 ppm -.00081	Pb2203 ppm -.00042	S_1820 ppm -.02158	Sb2068 ppm -.00136	Se1960 ppm -.00270	Si2881 ppm .03852
#1	.21221	-.00028	-.00063	.00008	.00021	-.00157	.00053	-.00030	.00009	-.01994	-.00196	-.00501	.04273
#2	.23794	.00143	.00321	.00013	.00009	-.01513	.00056	-.00131	-.00092	-.02323	-.00077	-.00038	.03431
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .08244	Sn1899 ppm -.00093	Sr4077 ppm .00008	Th2837 ppm -.00188	Ti3349 ppm -.00033	TI1908 ppm .00248	U_3701 ppm -.01227	V_2924 ppm -.00069	Zn2062 ppm -.00028	Zr3391 ppm -.00433			
#1	.09144	-.00145	.00005	-.00155	-.00038	.00283	-.00873	-.00097	-.00058	-.00451			
#2	.07343	-.00040	.00011	-.00220	-.00028	.00212	-.01581	-.00041	.00002	-.00414			
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3258.0	Y_3600 Cts/S 54873.	Y_3774 Cts/S 6465.0										
#1	3266.6	54972.	6428.9										
#2	3249.3	54774.	6501.1										

Sample Name: CCVL-3302200 Acquired: 6/1/2015 13:45:12 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00939	.11099	.01459	.09521	.01057	.00110	.10351	.22692	.00489	.01080	.01010	.01689
Stddev	.00065	.00005	.00344	.00032	.00014	.00011	.00266	.00559	.00031	.00029	.00007	.00031
%RSD	6.8930	.04830	23.571	.33919	1.3318	9.9220	2.5740	2.4630	6.3506	2.6408	.67603	1.8592
#1	.00893	.11095	.01215	.09543	.01067	.00102	.10540	.23087	.00510	.01060	.01015	.01667
#2	.00985	.11102	.01702	.09498	.01047	.00118	.10163	.22297	.00467	.01100	.01006	.01711

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10602	3.3955	F .01306	.22817	.01088	.01945	1.0641	.04290	2.8274	.00927	-.02164	.00832
Stddev	.00200	.0758	.00012	.00319	.00006	.00025	.0195	.00013	.0019	.00163	.00102	.00004
%RSD	1.8826	2.2330	.89775	1.3977	.54639	1.2817	1.8348	.29985	.06543	17.598	4.7240	.49785
#1	.10743	3.4491	.01314	.22591	.01083	.01928	1.0779	.04299	2.8287	.01042	-.02236	.00829
#2	.10461	3.3419	.01298	.23043	.01092	.01963	1.0503	.04281	2.8261	.00811	-.02091	.00835

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01329	.54266	1.1613	.10090	.01068	.01516	.00993	.01756	.07717	.01014	.02297	.01078
Stddev	.00001	.00435	.0093	.00106	.00018	.00044	.00018	.00073	.04094	.00002	.00065	.00075
%RSD	.06977	.80222	.80222	1.0481	1.6972	2.9073	1.8393	4.1353	53.052	.15018	2.8471	6.9530
#1	.01330	.54573	1.1679	.10165	.01081	.01547	.00980	.01807	.10612	.01015	.02251	.01025
#2	.01329	.53958	1.1547	.10015	.01055	.01485	.01006	.01704	.04822	.01013	.02344	.01131

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3281.4	54249.	6469.5									
Stddev	2.1	575.	76.0									
%RSD	.06381	1.0601	1.1748									
#1	3280.0	53843.	6415.8									
#2	3282.9	54656.	6523.3									

Sample Name: MB 280-279415/1-A Acquired: 6/1/2015 13:47:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	.00241	-.00217	-.00091	.00055	-.00001	-.00166	.02618	.00007
Stddev	.00012	.00054	.00039	.00050	.00014	.00008	.00022	.00174	.00005
%RSD	28.428	22.292	17.940	54.354	25.510	592.74	13.420	6.6446	64.566
#1	-.00051	.00279	-.00245	-.00056	.00045	.00004	-.00150	.02741	.00004
#2	-.00034	.00203	-.00190	-.00126	.00065	-.00007	-.00182	.02495	.00010
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00006	.00181	.01274	.21106	.00287	.00454	.00034	-.00005
Stddev	.00006	.00001	.00005	.00209	.02512	.00046	.00366	.00006	.00001
%RSD	609.43	20.641	2.7174	16.402	11.903	16.048	80.520	17.257	13.892
#1	.00005	.00007	.00177	.01422	.19330	.00320	.00713	.00038	-.00006
#2	-.00003	.00005	.00184	.01126	.22883	.00255	.00196	.00030	-.00005
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02369	-.00035	-.00662	.00063	-.02022	-.00228	-.00160	.02538	.05431
Stddev	.00270	.00034	.00023	.00048	.00126	.00046	.00425	.01631	.03491
%RSD	11.395	96.052	3.4229	75.090	6.2335	20.216	266.24	64.279	64.279
#1	-.02178	-.00011	-.00646	.00097	-.02111	-.00195	-.00460	.03692	.07900
#2	-.02559	-.00059	-.00678	.00030	-.01933	-.00261	.00141	.01384	.02963
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	.00009	-.00117	-.00042	-.00110	.00562	-.00045	.00103	-.00353
Stddev	.00017	.00000	.00018	.00018	.00159	.02701	.00012	.00083	.00099
%RSD	77.648	3.5297	15.142	43.938	145.19	480.44	26.074	80.157	27.980
#1	-.00034	.00009	-.00104	-.00029	.00003	.02472	-.00054	.00045	-.00283
#2	-.00010	.00009	-.00130	-.00054	-.00222	-.01347	-.00037	.00162	-.00423
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3268.6	54069.	6406.4						
Stddev	11.5	213.	29.0						
%RSD	.35283	.39423	.45241						
#1	3260.5	53919.	6426.9						
#2	3276.8	54220.	6385.9						

Sample Name: LCS 280-279415/2-A Acquired: 6/1/2015 13:50:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .04878	As1890 ppm 1.9993	B_2089 ppm .97168	Ba4554 ppm 2.0256	Be3130 ppm .04991	Bi2230 ppm 1.9363	Ca3179 ppm 50.583	Cd2288 ppm .09854
#1	.04864	1.9974	.96661	.98028	2.0261	.04995	1.9369	50.663	.09843
#2	.04893	2.0011	.97676	.97947	2.0252	.04986	1.9357	50.503	.09865
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .50140	Cu3247 ppm F .18574	Fe2599 ppm .25252	K_7664 ppm 1.0191	Li6707 ppm 51.628	Mg2790 ppm 1.0258	Mn2576 ppm 51.065	Mo2020 ppm .50085
#1	.49943	.18566	.25090	1.0209	51.722	1.0256	50.950	.50072	1.0321
#2	.50336	.18582	.25414	1.0174	51.535	1.0259	51.180	.50097	1.0390
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 52.111	P_1782 ppm .50103	Pb2203 ppm 178.284 {489}	S_1820 ppm 9.9849	Sb2068 ppm 182.034 {485}	Se1960 ppm 182.034 {485}	Si2881 ppm 206.833 {463}	SiO2 ppm 196.090 {472}
#1	51.819	.49911	9.9738	.50063	1.9779	.49662	1.9705	10.384	22.222
#2	52.403	.50295	9.9959	.50408	1.9734	.49670	1.9845	10.365	22.180
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.0446	Th2837 ppm 1.0048	Ti3349 ppm .99424	Tl1908 ppm 1.0024	U_3701 ppm 2.0138	V_2924 ppm 2.0632	Zn2062 ppm .50008	Zr3391 ppm .50600
#1	2.0340	1.0054	.99456	1.0033	2.0071	2.0745	.49889	.50699	.48836
#2	2.0552	1.0042	.99393	1.0014	2.0204	2.0519	.50127	.50501	.49345
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3167.1	Y_3774 Cts/S 53228.						
#1	3179.7	53317.	6473.5						
#2	3154.6	53140.	6509.7						

Sample Name: 280-69748-A-2-B Acquired: 6/1/2015 13:52:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00068	As1890 ppm .00551	B_2089 ppm .00401	Ba4554 ppm .01064	Be3130 ppm .08917	Bi2230 ppm -.00007	Ca3179 ppm -.00168	Cd2288 ppm 22.520
#1	-.00086	.00563	-.00608	.01081	.08878	-.00019	-.00175	22.507	.00024
#2	-.00049	.00538	-.00194	.01048	.08957	.00006	-.00161	22.533	.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00020	Cu3247 ppm .00043	Fe2599 ppm .00193	K_7664 ppm .01458	Li6707 ppm 1.1077	Mg2790 ppm .01206	Mn2576 ppm .00050	Mo2020 ppm -.00046
#1	-.00047	.00050	.00184	.01445	1.1310	.01189	4.7513	.00052	-.00056
#2	.00006	.00036	.00202	.01470	1.0844	.01224	4.8069	.00048	-.00036
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 13.433	P_1782 ppm .00147	Pb2203 ppm .01727	S_1820 ppm .00098	Sb2068 ppm 7.5897	Se1960 ppm -.00014	Si2881 ppm -.00111	SiO2 ppm 11.744
#1	13.223	.00137	.01792	.00051	7.5403	.00298	-.00194	11.869	25.400
#2	13.644	.00156	.01663	.00146	7.6392	-.00327	-.00029	11.619	24.865
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00124	Th2837 ppm .14268	Ti3349 ppm -.00155	Tl1908 ppm -.00037	U_3701 ppm -.00292	V_2924 ppm -.02297	Zn2062 ppm -.00089	Zr3391 ppm .00119
#1	-.00130	.14247	.00022	-.00017	-.00335	-.03336	-.00095	.00121	-.00394
#2	-.00118	.14289	-.00333	-.00058	-.00248	-.01257	-.00082	.00117	-.00329
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3255.8	Y_3774 Cts/S 53816.	377.433 {89}					
#1	3257.6	53917.	6430.4						
#2	3253.9	53714.	6560.5						

Sample Name: 280-69748-A-4-D Acquired: 6/1/2015 13:55:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00003	As1890 ppm .00573	B_2089 ppm .00142	Ba4554 ppm .00969	Be3130 ppm .09188	Bi2230 ppm .00003	Ca3179 ppm 23.249	Cd2288 ppm .00026
#1	-.00003	.00561	.00035	.00962	.09159	.00010	-.00009	23.164	.00026
#2	-.00003	.00585	-.00318	.00977	.09217	-.00004	-.00085	23.335	.00026
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00032	Cu3247 ppm .00035	Fe2599 ppm .00194	K_7664 ppm .00972	Li6707 ppm 1.1153	Mg2790 ppm .01226	Mn2576 ppm .4.8849	Mo2020 ppm .00051
#1	-.00024	.00024	.00203	.01051	1.1226	.01084	4.8865	.00055	-.00031
#2	-.00040	.00047	.00185	.00892	1.1079	.01367	4.8833	.00047	-.00120
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 14.109	P_1782 ppm .00109	Pb2203 ppm .01895	S_1820 ppm .00013	Sb2068 ppm 7.8042	Se1960 ppm .00271	Si2881 ppm .00219	SiO2 ppm 11.994
#1	13.976	.00074	.01850	.00033	7.7961	-.00172	.00258	11.929	25.528
#2	14.243	.00144	.01941	-.00007	7.8123	-.00371	.00179	12.060	25.808
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00152	Th2837 ppm .14777	Ti3349 ppm -.00009	Tl1908 ppm -.00091	U_3701 ppm -.00268	V_2924 ppm .00440	Zn2062 ppm -.00041	Zr3391 ppm .00038
#1	-.00163	.14720	-.00222	-.00090	-.00195	.00376	-.00006	.00024	-.00115
#2	-.00141	.14833	.00204	-.00091	-.00342	.00505	-.00075	.00053	-.00376
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3265.5	Y_3774 Cts/S 54543.	377.433 {89}	6637.7	15.5	167.	15.5	15.5
#1	3269.4	54425.	6648.6						
#2	3261.6	54661.	6626.8						

Sample Name: 280-69748-A-4-D SD@5 Acquired: 6/1/2015 13:57:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.00083	.00189	.00058	.01913	.00000	.00105	4.9203	-.00015
Stddev	.00055	.00105	.00253	.00001	.00010	.00004	.00185	.0221	.00001
%RSD	311.10	126.09	133.91	1.6198	.51814	1290.6	177.07	.44919	8.7867
#1	.00021	.00009	-.00010	.00058	.01920	.00003	.00026	4.9047	-.00016
#2	-.00056	.00158	-.00368	.00059	.01906	-.00003	-.00236	4.9359	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00019	.00198	.00796	.40609	.00446	1.0052	.00014	-.00048
Stddev	.00021	.00014	.00012	.00057	.04315	.00075	.0046	.00007	.00043
%RSD	163.40	74.242	5.8780	7.1277	10.625	16.841	.45319	52.440	88.956
#1	-.00002	.00030	.00207	.00756	.37558	.00393	1.0084	.00009	-.00018
#2	.00028	.00009	.00190	.00836	.43660	.00499	1.0020	.00020	-.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.0321	.00092	-.00545	.00050	1.5577	-.00285	-.00482	2.4960	5.3414
Stddev	.0485	.00031	.00267	.00032	.0314	.00009	.00012	.0008	.0018
%RSD	1.5980	33.761	48.906	63.745	2.0131	3.1492	2.4317	.03397	.03397
#1	3.0664	.00114	-.00357	.00027	1.5798	-.00279	-.00490	2.4954	5.3401
#2	2.9979	.00070	-.00734	.00073	1.5355	-.00291	-.00474	2.4966	5.3427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00343	.03091	-.00228	-.00029	-.00025	.02011	-.00078	-.00035	-.00451
Stddev	.00039	.00008	.00105	.00001	.00023	.01223	.00058	.00052	.00043
%RSD	11.254	.25756	45.916	1.8792	92.745	60.837	74.211	148.21	9.5675
#1	.00370	.03097	-.00154	-.00029	-.00009	.01146	-.00037	-.00072	-.00420
#2	.00316	.03086	-.00302	-.00030	-.00041	.02876	-.00120	.00002	-.00481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3270.7	54697.	6533.6						
Stddev	2.4	230.	27.3						
%RSD	.07226	.42127	.41813						
#1	3272.3	54860.	6553.0						
#2	3269.0	54534.	6514.3						

Sample Name: 280-69748-A-4-E MS Acquired: 6/1/2015 14:00:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0119	As1890 ppm .99163	B_2089 ppm .99244	Ba4554 ppm 2.1320	Be3130 ppm .05095	Bi2230 ppm F 1.9482	Ca3179 ppm 72.966	Cd2288 ppm .09923
#1	.04978	2.0122	.99318	.99690	2.1277	.05111	1.9589	72.929	.09958
#2	.04943	2.0116	.99009	.98797	2.1363	.05079	1.9376	73.004	.09889
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .18913	Cu3247 ppm .25375	Fe2599 ppm 1.0277	K_7664 ppm 53.421	Li6707 ppm 1.0486	Mg2790 ppm 55.880	Mn2576 ppm .50903	Mo2020 ppm 1.0416
#1	.50583	.18923	.25486	1.0343	53.357	1.0464	55.862	.50805	1.0432
#2	.50549	.18902	.25265	1.0210	53.486	1.0507	55.898	.51001	1.0400
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .50664	P_1782 ppm W 10.154	Pb2203 ppm .49892	S_1820 ppm 9.6098	Sb2068 ppm .49790	Se1960 ppm 1.9642	Si2881 ppm 22.138	SiO2 ppm 47.375
#1	67.490	.50781	10.188	.50138	9.6541	.49346	1.9680	22.192	47.492
#2	67.186	.50547	10.119	.49646	9.5655	.50234	1.9603	22.083	47.258
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0301	Th2837 ppm 1.1583	Ti3349 ppm 1.0051	Tl1908 ppm 1.0107	U_3701 ppm 1.9739	V_2924 ppm 2.0740	Zn2062 ppm .50738	Zr3391 ppm .51324
#1	2.0241	1.1558	1.0077	1.0089	1.9713	2.0487	.50581	.50927	.49467
#2	2.0361	1.1608	1.0026	1.0126	1.9766	2.0992	.50895	.51721	.49370
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3173.8	Y_3774 Cts/S 53115.	377.433 {89}				Zn2062 ppm .50738	Zr3391 ppm .51324
#1	3177.0	53289.	6616.2						
#2	3170.6	52940.	6624.6						

Sample Name: 280-69748-A-4-F MSD Acquired: 6/1/2015 14:03:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.0373	As1890 ppm 1.0061	B_2089 ppm 1.0188	Ba4554 ppm 2.1565	Be3130 ppm .05162	Bi2230 ppm F 1.9850	Ca3179 ppm 73.775	Cd2288 ppm .10090
#1	.05105	2.0370	1.0127	1.0188	2.1616	.05206	1.9847	74.077	.10058
#2	.04997	2.0376	.99951	1.0188	2.1514	.05118	1.9853	73.472	.10122
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .19006	Cu3247 ppm .25863	Fe2599 ppm 1.0336	K_7664 ppm 53.822	Li6707 ppm 1.0571	Mg2790 ppm 56.230	Mn2576 ppm .51298	Mo2020 ppm 1.0583
#1	.51209	.18970	.26100	1.0430	54.016	1.0591	56.377	.51304	1.0594
#2	.51087	.19041	.25626	1.0242	53.627	1.0551	56.083	.51291	1.0571
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .51116	P_1782 ppm W 10.296	Pb2203 ppm .50634	S_1820 ppm 9.8234	Sb2068 ppm .50968	Se1960 ppm 1.9986	Si2881 ppm 22.357	SiO2 ppm 47.844
#1	68.232	.51223	10.291	.50519	9.8215	.51021	2.0049	22.477	48.101
#2	67.642	.51009	10.301	.50749	9.8252	.50915	1.9924	22.237	47.587
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 1.1724	Th2837 ppm 1.0188	Ti3349 ppm 1.0276	Tl1908 ppm 2.0123	U_3701 ppm 2.1106	V_2924 ppm .51358	Zn2062 ppm .51259	Zr3391 ppm .49629
#1	2.0653	1.1764	1.0195	1.0287	2.0170	2.1410	.51245	.50984	.49806
#2	2.0493	1.1684	1.0182	1.0266	2.0077	2.0801	.51471	.51533	.49452
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 53120.	Y_3774 Cts/S 6609.0						
#1	3145.9	53312.	6562.3						
#2	3155.3	52928.	6655.8						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 14:05:29 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00337	50.175	-.00189	.00057	.00082	.00009	.97432	.03384	-.00028	-.00028	.00047	.00158	50.173
Stddev	.00027	.048	.00031	.00015	.00007	.00004	.00214	.00087	.00003	.00009	.00040	.00007	.566
%RSD	8.1649	.09562	16.434	26.202	8.8534	47.052	.21988	2.5837	12.010	33.261	84.762	4.4516	1.1272
#1	.00317	50.209	-.00211	.00067	.00087	.00006	.97584	.03322	-.00030	-.00035	.00076	.00163	50.573
#2	.00356	50.141	-.00167	.00046	.00077	.00011	.97281	.03446	-.00025	-.00021	.00019	.00153	49.774
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.27510	.00359	.04671	-.00144	-.00042	252.10	.00241	-.00096	.00137	4.7934	-.00963	.00127	.00145
Stddev	.02281	.00052	.00533	.00011	.00005	.30	.00001	.00196	.00172	.0186	.00374	.00277	.02736
%RSD	8.2917	14.431	11.417	7.3710	12.330	.12055	.21137	202.81	125.27	.38873	38.871	218.84	1891.8
#1	.29123	.00322	.05048	-.00151	-.00045	251.88	.00241	.00042	.00258	4.8066	-.01228	-.00069	-.01790
#2	.25897	.00395	.04294	-.00136	-.00038	252.31	.00242	-.00235	.00016	4.7802	-.00698	.00322	.02079
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.00309	-.00401	.00039	4.9660	-.01387	.00409	10.194	.00235	-.00112	-.12500			
Stddev	.05855	.00043	.00008	.0053	.00014	.00001	.001	.00015	.00019	.00184			
%RSD	1891.8	10.696	20.110	.10703	1.0284	.29946	.00650	6.5744	16.902	1.4704			
#1	-.03830	-.00431	.00044	4.9697	-.01398	.00409	10.193	.00224	-.00098	-.12370			
#2	.04449	-.00371	.00033	4.9622	-.01377	.00410	10.194	.00246	-.00125	-.12630			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	3193.0	52767.	6473.3										
Stddev	24.9	213.	18.1										
%RSD	.77941	.40384	.28010										
#1	3175.4	52616.	6486.1										
#2	3210.6	52917.	6460.5										

Sample Name: CCV-3296664 Acquired: 6/1/2015 14:08:11 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .49712	Al1670 ppm .53378	As1890 ppm .98747	B_2089 ppm .48638	Ba4554 ppm .50737	Be3130 ppm .50493	Bi2230 ppm -.00040	Ca3179 ppm 5.2222	Cd2288 ppm .49221	Co2286 ppm .52072	Cr2055 ppm .48362	Cu3247 ppm .49987	Fe2599 ppm 2.5525
#1	.49617	.53417	.98705	.48430	.50599	.50346	-.00164	5.2030	.49134	.52065	.48162	.49959	2.5330
#2	.49807	.53339	.98789	.48846	.50876	.50640	.00083	5.2413	.49308	.52079	.48562	.50016	2.5720
Check ? Value Range	Chk Pass	None	Chk Pass										

Elem Units Avg Stddev %RSD	K_7664 ppm 51.445	Li6707 ppm 1.0279	Mg2790 ppm 20.686	Mn2576 ppm .51196	Mo2020 ppm .50122	Na5895 ppm 5.1713	Ni2316 ppm .52035	P_1782 ppm .96766	Pb2203 ppm 1.0055	S_1820 ppm -.02123	Sb2068 ppm .96250	Se1960 ppm .94810	Si2881 ppm 5.1730
#1	51.319	1.0264	20.657	.51223	.49973	5.1432	.52025	.96551	1.0007	-.02189	.95951	.94021	5.1276
#2	51.570	1.0294	20.714	.51169	.50271	5.1993	.52046	.96981	1.0104	-.02058	.96549	.95599	5.2183
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem Units Avg Stddev %RSD	SiO2 ppm 11.070	Sn1899 ppm 1.0046	Sr4077 ppm .50512	Th2837 ppm -.00664	Ti3349 ppm .50490	TI1908 ppm 1.0116	U_3701 ppm .00846	V_2924 ppm .50880	Zn2062 ppm .52148	Zr3391 ppm .51291			
#1	10.973	1.0066	.50303	-.00611	.50427	1.0058	-.00470	.50507	.51792	.50677			
#2	11.167	1.0026	.50720	-.00717	.50553	1.0174	.02162	.51253	.52505	.51905			
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass			

Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3247.8	Y_3600 Cts/S 53647.	Y_3774 Cts/S 6520.7										
#1	3237.1	53486.	6557.4										
#2	3258.4	53808.	6483.9										

Sample Name: CCB Acquired: 6/1/2015 14:10:39 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00040	-0.00062	-0.00385	-0.00109	.00011	-0.00014	.00137	.00461	-0.00006	.00020	.00002
Stddev	.00069	.00013	.00143	.00076	.00024	.00000	.00044	.00648	.00036	.00024	.00003
%RSD	170.63	20.460	37.148	69.921	215.20	1.4924	32.081	140.55	625.78	120.84	172.01
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00171	.00228	.16866	-0.0024	.00413	.00008	-0.0001	.01096	-0.0001	-0.0575	-0.00095
Stddev	.00008	.00009	.01055	.00132	.00246	.00002	.00004	.01144	.00004	.00281	.00200
%RSD	4.4938	3.7928	6.2544	560.74	59.404	22.584	766.40	104.37	326.22	48.919	210.32
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.2229	-0.00298	F -0.00917	.00189	.00404	-0.00158	.00012	-0.00209	-0.00027	.00195	.00596
Stddev	.00037	.00228	.00307	.00022	.00048	.00001	.00003	.00078	.00008	.00074	.00996
%RSD	1.6615	76.499	33.486	11.882	11.882	.46564	28.969	37.591	28.173	37.805	167.11
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-0.0079	-0.00099	-0.0454								
Stddev	.00004	.00025	.00030								
%RSD	5.0955	25.729	6.6793								
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	3301.0	55273.	6589.8								
Stddev	6.3	402.	11.8								
%RSD	.19056	.72744	.17848								
#1											
#2											

Sample Name: CCVL3302200I Acquired: 6/1/2015 14:13:02 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.01006	.11014	.01224	.09613	.01071	.00101	.10401	.22245	.00527	.01094	.00992	.01690	.10784
Stddev	.00007	.00069	.00486	.00019	.00008	.00005	.00435	.00708	.00030	.00006	.00021	.00011	.00271
%RSD	.71281	.62291	39.699	.19556	.75108	4.6445	4.1853	3.1850	5.7099	.53912	2.0766	.67842	2.5159
#1	.01011	.11063	.01568	.09599	.01065	.00104	.10093	.22746	.00549	.01090	.00977	.01682	.10976
#2	.01001	.10966	.00880	.09626	.01077	.00098	.10709	.21744	.00506	.01099	.01006	.01698	.10592

Check ? Value Range	Chk Pass												
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	3.3505	.01275	.22362	.01085	.01941	1.0820	.04207	2.7962	.00825	-.01517	.00746	.01088	.53279
Stddev	.0444	.00113	.00389	.00020	.00021	.0116	.00072	.0105	.00021	.00424	.00180	.00073	.00980
%RSD	1.3260	8.8299	1.7380	1.8319	1.1038	1.0717	1.7198	.37482	2.5936	27.972	24.178	6.6974	1.8400
#1	3.3819	.01354	.22087	.01071	.01956	1.0902	.04156	2.8036	.00810	-.01818	.00619	.01139	.53972
#2	3.3191	.01195	.22637	.01099	.01926	1.0738	.04258	2.7888	.00840	-.01217	.00874	.01036	.52586

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass									
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	1.1402	.09902	.01055	.01285	.00956	.01864	.05017	.00954	.02262	.01060
Stddev	.0210	.00075	.00006	.00035	.00004	.00098	.01418	.00056	.00090	.00076
%RSD	1.8400	.75496	.59560	2.7563	.39213	5.2484	28.268	5.8864	3.9798	7.2081
#1	1.1550	.09955	.01059	.01260	.00959	.01795	.04014	.00914	.02326	.01006
#2	1.1253	.09850	.01050	.01310	.00953	.01933	.06019	.00994	.02198	.01114

Check ? Value Range	Chk Pass									
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3317.6	55111.	6641.9
Stddev	6.7	115.	39.9
%RSD	.20265	.20782	.60043
#1	3312.9	55192.	6613.7
#2	3322.4	55030.	6670.1

Sample Name: 280-69748-A-5-B Acquired: 6/1/2015 14:15:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00302	-.00551	.00349	.09331	-.00012	-.00193	35.395	.00024
Stddev	.00046	.00027	.00439	.00017	.00088	.00003	.00060	.005	.00007
%RSD	1167.5	8.7926	79.657	4.9577	.94170	21.457	31.026	.01324	30.030
#1	.00029	.00284	-.00241	.00361	.09269	-.00014	-.00151	35.392	.00019
#2	-.00037	.00321	-.00861	.00337	.09394	-.00010	-.00236	35.398	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.00025	.00243	.00524	.61971	.00528	7.4551	.00059	-.00111
Stddev	.00033	.00023	.00003	.00225	.02665	.00060	.0267	.00001	.00031
%RSD	133.06	92.470	1.0904	42.955	4.2999	11.432	.35839	2.5114	27.621
#1	-.00048	.00041	.00241	.00365	.60087	.00485	7.4362	.00061	-.00089
#2	-.00001	.00009	.00245	.00683	.63856	.00570	7.4740	.00058	-.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.176	.00327	-.00518	.00159	11.655	-.00165	-.00190	9.2445	19.783
Stddev	421	.00051	.00299	.00047	.039	.00021	.00163	.1765	.378
%RSD	2.3179	15.691	57.586	29.769	.33604	12.821	86.045	1.9092	1.9092
#1	17.878	.00363	-.00730	.00192	11.627	-.00180	-.00074	9.1197	19.516
#2	18.474	.00291	-.00307	.00125	11.682	-.00150	-.00305	9.3693	20.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.19672	-.00034	-.00054	-.00421	-.02611	-.00096	.00102	-.00357
Stddev	.00016	.00020	.00040	.00066	.00185	.00357	.00050	.00060	.00185
%RSD	128.54	.10168	114.94	121.87	43.988	13.666	51.495	58.319	51.970
#1	-.00024	.19658	-.00062	-.00100	-.00290	-.02863	-.00061	.00145	-.00488
#2	-.00001	.19687	-.00006	-.00007	-.00552	-.02358	-.00132	.00060	-.00226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3223.8	53632.	6520.4						
Stddev	14.8	20.	43.3						
%RSD	.45954	.03787	.66462						
#1	3213.3	53647.	6489.7						
#2	3234.2	53618.	6551.0						

Sample Name: 280-69748-A-6-B Acquired: 6/1/2015 14:18:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00001	.06503	-.00340	.01616	.06648	.00007	-.00260	25.579	-.00009
#2	.00039	.06515	-.00554	.01642	.06568	-.00004	-.00218	25.583	.00024
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00025	-.00004	.00169	.04125	.66084	.00661	5.1401	.00063	-.00078
#2	.00014	-.00006	.00224	.03987	.69444	.00555	5.1512	.00050	-.00084
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	12.633	.00160	-.00197	.00194	9.9018	-.00239	-.00548	8.7822	18.794
#2	12.567	.00182	-.00344	.00046	9.9391	-.00366	-.00258	8.6625	18.538
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00243	.13046	.00017	.00027	-.00427	-.02764	-.00054	.00117	-.00453
#2	-.00287	.13018	-.00063	.00072	-.00041	-.02766	-.00076	-.00030	-.00433
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3222.6	54074.	6574.9						
#2	3227.3	53784.	6540.5						

Sample Name: 280-69748-A-7-B Acquired: 6/1/2015 14:21:01 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00389	-.00039	.03124	.11909	-.00011	-.00273	105.07	.00024
Stddev	.00016	.00040	.00095	.00060	.00072	.00006	.00043	.58	.00008
%RSD	632.78	10.230	242.18	1.9365	.60452	56.113	15.903	.55127	31.966
#1	.00014	.00417	.00028	.03081	.11859	-.00006	-.00242	104.67	.00029
#2	-.00009	.00361	-.00107	.03167	.11960	-.00015	-.00304	105.48	.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00135	.00276	.03205	2.8785	.08315	20.737	.01121	-.00065
Stddev	.00003	.00007	.00043	.00064	.0180	.00192	.033	.00012	.00001
%RSD	22.521	5.4802	15.639	2.0061	.62598	2.3072	.15778	1.0933	1.1232
#1	.00009	.00141	.00246	.03160	2.8657	.08179	20.760	.01129	-.00066
#2	.00013	.00130	.00307	.03251	2.8912	.08451	20.714	.01112	-.00065
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	68.670	.00363	.01367	.00240	21.567	-.00018	.00494	9.9757	21.348
Stddev	1.284	.00012	.00171	.00126	.101	.00067	.00139	.1183	.253
%RSD	1.8692	3.3055	12.537	52.517	.46807	370.05	28.121	1.1862	1.1862
#1	67.763	.00355	.01246	.00151	21.496	-.00066	.00593	9.8920	21.169
#2	69.578	.00372	.01488	.00330	21.639	.00029	.00396	10.059	21.527
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.69272	-.00048	-.00061	-.00517	.00912	-.00142	.00155	-.00452
Stddev	.00219	.00312	.00085	.00025	.00302	.01856	.00026	.00076	.00125
%RSD	1095.7	.45003	175.10	40.379	58.319	203.42	18.324	48.863	27.661
#1	.00135	.69051	.00012	-.00044	-.00731	-.00400	-.00160	.00209	-.00363
#2	-.00175	.69492	-.00108	-.00078	-.00304	.02225	-.00123	.00102	-.00540
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3152.5	52592.	6461.6						
Stddev	6.5	208.	61.6						
%RSD	.20553	.39595	.95282						
#1	3157.1	52445.	6505.2						
#2	3147.9	52739.	6418.1						

Sample Name: 280-69748-A-8-B Acquired: 6/1/2015 14:23:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm	As1890 .00359	B_2089 .00271	Ba4554 .11146	Be3130 .08541	Bi2230 -.00012	Ca3179 -.00161	Cd2288 112.70
#1	-.00085	.00369	-.00387	.11219	.08508	-.00015	.00156	112.49	.00014
#2	-.00009	.00349	-.00156	.11074	.08575	-.00010	-.00478	112.91	.00030
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 .00038	Fe2599 .00368	K_7664 .1021	Li6707 3.6562	Mg2790 .26112	Mn2576 33.355	Mo2020 .03397
#1	-.00043	.00046	.00332	.01105	3.6438	.25989	33.367	.03375	-.00193
#2	.00010	.00029	.00404	.00937	3.6687	.26235	33.343	.03419	-.00092
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm	P_1782 .00587	Pb2203 -.00096	S_1820 .00173	Sb2068 56.022	Se1960 -.00163	Si2881 W -.00532	SiO2 7.9239
#1	199.92	.00658	-.00041	.00248	55.946	-.00200	-.00357	7.9896	17.098
#2	201.30	.00516	-.00151	.00098	56.099	-.00125	-.00707	7.8582	16.816
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 1.0922	Ti3349 -.00208	Tl1908 -.00046	U_3701 190.856 {477}	V_2924 -.00785	Zn2062 -.02247	Zr3391 -.00179
#1	.00040	1.0893	-.00103	-.00064	-.00971	-.00530	-.00150	.00322	-.00055
#2	-.00086	1.0952	-.00313	-.00027	-.00599	.05024	-.00208	.00425	-.00170
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S	Y_3774 Cts/S	360.073 {94}	377.433 {89}				
#1	3100.5	52411.	6411.0						
#2	3096.7	51860.	6416.8						

Sample Name: 280-69748-A-9-B Acquired: 6/1/2015 14:26:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279415 6010B (Ag)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00009	As1890 ppm .00262	B_2089 ppm .00158	Ba4554 ppm .05229	Be3130 ppm .03656	Bi2230 ppm .00008	Ca3179 ppm .00072	Cd2288 ppm .213.23
#1	.00010	.00279	-.00086	.05195	.03634	-.00006	.00191	213.54	-.00001
#2	-.00028	.00244	-.00229	.05263	.03679	-.00009	-.00047	212.91	.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00022	Cu3247 ppm .00079	Fe2599 ppm .00390	K_7664 ppm .01900	Li6707 ppm 4.2888	Mg2790 ppm .27238	Mn2576 ppm .56.686	Mo2020 ppm .01035
#1	-.00017	.00081	.00373	.01899	4.2592	.27286	56.669	.01027	.00250
#2	-.00026	.00076	.00407	.01902	4.3185	.27190	56.704	.01042	.00158
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 159.22	P_1782 ppm .00544	Pb2203 ppm .00376	S_1820 ppm .00132	Sb2068 ppm 160.94	Se1960 ppm .00402	Si2881 ppm .33616	SiO2 ppm .89609
#1	159.45	.00567	.00784	.00288	160.51	.00463	.33459	8.9517	19.157
#2	159.00	.00520	-.00032	-.00023	161.37	.00342	.33773	8.9700	19.196
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00108	Th2837 ppm 1.8748	Ti3349 ppm -.00157	Tl1908 ppm -.00068	U_3701 ppm -.00657	V_2924 ppm .10850	Zn2062 ppm -.00138	Zr3391 ppm .00140
#1	-.00137	1.8780	-.00104	-.00062	-.00559	.11912	-.00144	.00188	.00000
#2	-.00080	1.8715	-.00210	-.00074	-.00754	.09787	-.00131	.00091	-.00133
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 3031.0	Y_3774 Cts/S 50955.	377.433 {89}					
#1	3032.4	50973.	6428.3						
#2	3029.5	50937.	6413.8						

Sample Name: 280-69211-E-13-B Acquired: 6/1/2015 14:28:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/18 Custom ID2: Custom ID3:

Comment: 277625 6010B (K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.76176	-.00712	.27106	.02308	-.00011	-.00069	410.21	-.00019
Stddev	.00025	.01214	.00495	.00128	.00042	.00010	.00046	6.85	.00008
%RSD	242.71	1.5937	69.423	.47183	1.8007	90.087	66.113	1.6693	42.792
#1	.00028	.77034	-.00363	.27197	.02279	-.00018	-.00102	415.05	-.00013
#2	-.00007	.75317	-.01062	.27016	.02337	-.00004	-.00037	405.37	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	.00212	.01257	2.2573	7.9837	.04276	163.85	.53243	-.00032
Stddev	.00011	.00018	.00008	.0031	.0158	.00026	.45	.00212	.00001
%RSD	6.5550	8.2902	.62109	.13742	.19784	.60690	.27248	.39864	3.9020
#1	.00156	.00225	.01262	2.2595	7.9949	.04258	163.54	.53093	-.00033
#2	.00171	.00200	.01251	2.2551	7.9725	.04295	164.17	.53393	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.053	.01108	.04395	.00441	F 353.07	.00688	.00003	7.0237	15.031
Stddev	.378	.00024	.00412	.00092	.57	.00294	.00123	.0016	.003
%RSD	1.2164	2.1931	9.3816	20.909	.16089	42.721	3795.7	.02312	.02312
#1	30.786	.01125	.04104	.00376	353.47	.00480	-.00083	7.0225	15.028
#2	31.320	.01090	.04687	.00507	352.67	.00895	.00090	7.0248	15.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00121	.94281	-.00031	.03553	-.00984	-.00929	-.00103	.01336	-.00060
Stddev	.00031	.00121	.00042	.00283	.00026	.01729	.00013	.00009	.00024
%RSD	25.277	.12816	135.71	7.9640	2.6187	186.03	12.399	.65184	40.498
#1	-.00099	.94195	-.00060	.03753	-.00966	-.02152	-.00094	.01330	-.00077
#2	-.00143	.94366	-.00001	.03353	-.01002	.00293	-.00112	.01343	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2958.4	48812.	6174.7						
Stddev	32.7	410.	64.8						
%RSD	1.1044	.84054	1.0488						
#1	2935.3	49102.	6128.9						
#2	2981.5	48522.	6220.5						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 14:31:40 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00362	49.339	-0.0166	-0.0195	.00063	.00010	.95518	.04695	-.00014	-.00048	.00060
Stddev	.00002	.154	.00360	.00006	.00032	.00003	.00191	.00224	.00044	.00024	.00003
%RSD	.63022	.31228	216.90	2.8967	50.540	25.911	.19964	4.7666	325.95	49.946	4.3788
#1	.00364	49.230	-.00420	-.00199	.00040	.00008	.95383	.04853	.00018	-.00065	.00058
#2	.00361	49.448	.00089	-.00191	.00085	.00012	.95652	.04537	-.00045	-.00031	.00062
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	.00125	48.658	.21772	.00032	.04744	.00143	-.00104	249.62	.00249	-.00139	-.00015
Stddev	.00061	.059	.04091	.00038	.00417	.00009	.00022	.56	.00000	.00020	.00023
%RSD	48.670	.12112	18.789	117.86	8.7907	6.1500	21.074	.22308	.07116	14.469	153.25
#1	.00082	48.616	.18880	.00005	.04449	-.00137	-.00089	249.23	.00249	-.00125	.00001
#2	.00168	48.699	.24665	.00058	.05039	-.00150	-.00120	250.02	.00248	-.00153	-.00031
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm
Avg	W 4.7059	-.00605	.00104	.00408	.00873	-.00380	.00046	4.9014	-.01350	.00429	10.041
Stddev	.0108	.00230	.00457	.00543	.01163	.00059	.00013	.0092	.00001	.00127	.002
%RSD	.22922	37.962	437.59	133.25	133.25	15.557	28.023	.18824	.04544	29.507	.01901
#1	4.7136	-.00767	.00428	.00792	.01695	-.00422	.00055	4.9079	-.01350	.00519	10.040
#2	4.6983	-.00443	-.00219	.00024	.00050	-.00339	.00037	4.8949	-.01349	.00339	10.043
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00196	-.00171	-.12785								
Stddev	.00015	.00014	.00199								
%RSD	7.4873	7.9502	1.5588								
#1	.00206	-.00162	-.12926								
#2	.00185	-.00181	-.12644								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	3129.7	51204.	6237.2								
Stddev	9.1	284.	41.4								
%RSD	.29110	.55403	.66306								
#1	3136.1	51405.	6207.9								
#2	3123.2	51003.	6266.4								

Sample Name: CCV-3296664 Acquired: 6/1/2015 14:34:16 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.48937	.53121	.96935	.47391	.49768	.49688	.00155	5.1654	.48283	.51399	.46759	.48844	2.5423
Stddev	.00246	.00062	.00196	.00073	.00066	.00110	.00019	.0153	.00002	.00661	.00584	.00045	.0152
%RSD	.50193	.11662	.20222	.15438	.13239	.22118	11.949	.29617	.00325	1.2867	1.2488	.09197	.59834
#1	.49111	.53077	.97074	.47443	.49722	.49610	.00142	5.1546	.48284	.51866	.47172	.48876	2.5315
#2	.48764	.53164	.96797	.47339	.49815	.49766	.00168	5.1763	.48282	.50931	.46346	.48813	2.5530

Check ? Value Range	Chk Pass	None	Chk Pass										
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Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	50.968	1.0153	20.465	.50784	.49257	5.1440	.51250	.95492	.98621	-.01160	.93309	.92509	5.1532
Stddev	.034	.0019	.005	.00022	.00623	.0078	.00660	.00344	.01130	.00125	.01165	.00621	.0193
%RSD	.06696	.18592	.02348	.04331	1.2653	.15134	1.2873	.36049	1.1457	10.738	1.2484	.67175	.37456
#1	50.944	1.0166	20.461	.50768	.49697	5.1384	.51717	.95736	.99420	-.01248	.94133	.92948	5.1669
#2	50.992	1.0139	20.468	.50799	.48816	5.1495	.50784	.95249	.97822	-.01072	.92485	.92069	5.1396

Check ? Value Range	Chk Pass												
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Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	11.028	.99334	.49567	-.00681	.49776	.98651	.03149	.50422	.53068	.50293
Stddev	.041	.01071	.00136	.00325	.00103	.00756	.04340	.00203	.00209	.00047
%RSD	.37456	1.0782	.27412	47.685	.20607	.76653	137.83	.40217	.39468	.09345
#1	11.057	1.0009	.49471	-.00452	.49703	.99186	.00080	.50279	.53216	.50260
#2	10.999	.98577	.49664	-.00911	.49848	.98117	.06217	.50565	.52919	.50326

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	3181.4	52265.	6215.7									
Stddev	4.9	180.	6.2									
%RSD	.15466	.34365	.09954									
#1	3177.9	52138.	6211.4									
#2	3184.9	52392.	6220.1									

Sample Name: CCB Acquired: 6/1/2015 14:36:45 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm -.00015	Al1670 ppm -.00085	As1890 ppm -.00042	B_2089 ppm -.00098	Ba4554 ppm .00037	Be3130 ppm -.00008	Bi2230 ppm .00120	Ca3179 ppm .00647	Cd2288 ppm -.00012	Co2286 ppm .00016	Cr2055 ppm -.00019	Cu3247 ppm .00125	Fe2599 ppm .00071
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	K_7664 ppm .15151	Li6707 ppm -.00136	Mg2790 ppm .00150	Mn2576 ppm .00016	Mo2020 ppm -.00006	Na5895 ppm .01871	Ni2316 ppm .00043	P_1782 ppm -.00764	Pb2203 ppm -.00033	S_1820 ppm -.01084	Sb2068 ppm -.00293	Se1960 ppm -.00324	Si2881 ppm .03365
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	SiO2 ppm .07200	Sn1899 ppm -.00168	Sr4077 ppm .00012	Th2837 ppm -.00007	Ti3349 ppm -.00039	TI1908 ppm .00292	U_3701 ppm -.02098	V_2924 ppm -.00042	Zn2062 ppm -.00107	Zr3391 ppm -.00450			
#1													
#2													
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 3217.1	Y_3600 Cts/S 52692.	Y_3774 Cts/S 6228.5										
#1													
#2													

Sample Name: CCVL3302200 Acquired: 6/1/2015 14:39:07 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.00967	.10735	.01377	.09268	.01012	.00099	.10147	.21686	.00488	.01040	.00973	.01611
Stddev	.00063	.00091	.00075	.00085	.00002	.00004	.00020	.00188	.00014	.00008	.00011	.00014
%RSD	6.4830	.84353	5.4158	.91554	.21604	3.7599	.19362	.86896	2.7750	.77522	1.0985	.85733

#1	.00922	.10799	.01324	.09328	.01013	.00102	.10133	.21819	.00478	.01045	.00980	.01601
#2	.01011	.10671	.01430	.09208	.01010	.00097	.10160	.21552	.00497	.01034	.00965	.01621

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10517	3.2592	.01256	.21837	.01067	.01876	1.0671	.04145	2.7411	.00919	-.01049	.00926
Stddev	.00398	.0053	.00116	.00421	.00003	.00055	.0089	.00059	.0283	.00013	.00207	.00278
%RSD	3.7834	.16093	9.2197	1.9285	.29757	2.9577	.83156	1.4241	1.0305	1.3973	19.732	30.019
#1	.10236	3.2629	.01338	.22135	.01069	.01916	1.0609	.04187	2.7610	.00910	-.01195	.01123
#2	.10798	3.2555	.01175	.21539	.01064	.01837	1.0734	.04103	2.7211	.00928	-.00903	.00729

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00802	.51028	1.0920	.09726	.01028	.01474	.00923	.01613	F .03975	.00938	.02326	.01069
Stddev	.00254	.01328	.0284	.00147	.00001	.00084	.00029	.00026	.03854	.00011	.00070	.00156
%RSD	31.744	2.6022	2.6022	1.5157	.08628	5.7173	3.1183	1.5896	96.938	1.1853	3.0215	14.593
#1	.00622	.51967	1.1121	.09830	.01027	.01414	.00943	.01595	.06700	.00930	.02276	.01179
#2	.00982	.50089	1.0719	.09622	.01029	.01534	.00903	.01631	.01250	.00946	.02375	.00959

Check ? Value Range	Chk Fail .01500 -30.000%	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Pass						
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3300.7	53659.	6400.1
Stddev	3.4	100.	4.7
%RSD	.10429	.18655	.07272
#1	3298.2	53588.	6403.4
#2	3303.1	53730.	6396.9

Sample Name: MB 280-279426/1-A Acquired: 6/1/2015 14:41:47 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00023	.00256	.00172	-.00163	.00055	-.00001	.00001	.01011	-.00001
Stddev	.00033	.00018	.00013	.00053	.00007	.00003	.00117	.00715	.00023
%RSD	142.08	7.0576	7.8098	32.735	12.264	340.84	9212.2	70.693	1854.2
#1	-.00047	.00269	.00182	-.00125	.00060	.00001	.00084	.01517	.00015
#2	.00000	.00243	.00163	-.00200	.00050	-.00003	-.00082	.00506	-.00017
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.01000								
Low Limit	-.00010								
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	-.00002	W .00187	.00756	.11242	.00004	.00305	.00014	-.00033
Stddev	.00005	.00002	.00010	.00138	.01777	.00009	.00005	.00004	.00002
%RSD	162.56	133.97	5.1948	18.260	15.811	237.11	1.5387	26.695	5.4626
#1	.00000	-.00003	.00180	.00658	.09985	-.00003	.00308	.00011	-.00032
#2	.00006	.00000	.00193	.00854	.12499	.00010	.00302	.00017	-.00034
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00159						
Low Limit			-.00500						
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00810	-.00025	W -.00778	-.00076	F -.01680	-.00295	-.00373	F .01208	.02584
Stddev	.00892	.00007	.00153	.00034	.00344	.00109	.00261	.01873	.04008
%RSD	110.20	30.535	19.613	44.508	20.489	37.122	69.954	155.09	155.09
#1	.00179	-.00030	-.00670	-.00052	-.01437	-.00217	-.00188	-.00117	-.00250
#2	.01440	-.00019	-.00886	-.00100	-.01923	-.00372	-.00557	.02532	.05418
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None
High Limit			.01035		.01000			.01000	
Low Limit			-.00500		-.01000			-.01000	
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00108	.00012	-.00108	-.00036	.00198	.00671	-.00050	.00003	-.00355
Stddev	.00149	.00003	.00092	.00036	.00018	.01965	.00013	.00012	.00022
%RSD	137.45	26.201	84.768	99.349	9.2957	292.70	26.947	352.41	6.1771
#1	-.00213	.00010	-.00173	-.00011	.00185	.02060	-.00060	-.00005	-.00370
#2	-.00003	.00014	-.00043	-.00061	.00211	-.00718	-.00040	.00012	-.00339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3275.7	54661.	6561.1						
Stddev	15.4	88.	5.5						
%RSD	.46905	.16112	.08456						
#1	3286.6	54724.	6557.2						
#2	3264.8	54599.	6565.0						

Sample Name: LCS 280-279426/2-A Acquired: 6/1/2015 14:44:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04867	1.9695	.94713	.94456	1.9447	.04848	1.8658	48.762	.09520
#2	.04788	1.9634	.93963	.94365	1.9481	.04828	1.8625	48.799	.09541
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.48759	.17860	.24416	1.0163	49.856	.98827	49.622	.49387	.99858
#2	.48627	.17899	.24221	1.0286	50.021	.98806	49.618	.49581	1.0003
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	51.066	.48484	9.6887	.48044	1.8597	.47290	1.8610	9.9951	21.389
#2	51.182	.48649	9.7174	.47961	1.8833	.47248	1.8751	10.098	21.609
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	1.9224	.96727	.97557	.97748	1.8842	1.9977	.49194	.50556	.46616
#2	1.9345	.97033	.97253	.97812	1.8972	2.0682	.49271	.51110	.46920
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	3157.0	52616.	6453.6						
#2	3165.3	52163.	6436.6						

Sample Name: LCSD 280-279426/3-A Acquired: 6/1/2015 14:46:34 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04916	1.9983	.96290	.96453	1.9831	.04952	1.8954	49.946	.09749
Stddev	.00033	.0024	.00225	.00118	.0004	.00015	.0045	.084	.00008
%RSD	.67691	.12142	.23367	.12231	.01915	.30629	.23585	.16834	.08169
#1	.04940	2.0000	.96449	.96369	1.9834	.04963	1.8922	50.006	.09755
#2	.04893	1.9966	.96131	.96536	1.9829	.04941	1.8986	49.887	.09744
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49595	F .18259	.24545	.98892	51.057	1.0110	50.377	.50305	1.0200
Stddev	.00157	.00115	.00004	.01136	.090	.0025	.098	.00010	.0010
%RSD	.31708	.63039	.01585	1.1491	.17726	.25104	.19450	.01985	.09456
#1	.49706	.18178	.24548	.99695	50.993	1.0092	50.446	.50312	1.0207
#2	.49484	.18340	.24542	.98088	51.121	1.0128	50.308	.50298	1.0193
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.460	.49415	9.9144	.48746	1.9106	.48090	1.9102	10.168	21.760
Stddev	.024	.00058	.0022	.00204	.0068	.00034	.0050	.014	.030
%RSD	.04713	.11725	.02238	.41830	.35633	.07168	.26184	.13703	.13703
#1	51.443	.49374	9.9160	.48890	1.9058	.48114	1.9137	10.158	21.739
#2	51.477	.49456	9.9128	.48602	1.9154	.48065	1.9067	10.178	21.781
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9619	.98794	.99134	.99424	1.9233	2.0260	.50217	.51400	.47053
Stddev	.0052	.00063	.00158	.00061	.0028	.0259	.00105	.00679	.00327
%RSD	.26692	.06365	.15925	.06168	.14696	1.2802	.20863	1.3207	.69561
#1	1.9656	.98839	.99246	.99467	1.9213	2.0444	.50142	.50920	.47284
#2	1.9582	.98750	.99023	.99380	1.9253	2.0077	.50291	.51880	.46821
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	3159.6	52460.	6360.8						
Stddev	9.5	79.	45.5						
%RSD	.30119	.15149	.71518						
#1	3152.9	52404.	6328.6						
#2	3166.4	52517.	6393.0						

Sample Name: 280-69781-N-1-D Acquired: 6/1/2015 14:48:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.05700	.01023	W 14.051	.35974	-.00015	.00030	435.36	-.00025
Stddev	.00043	.00026	.00292	.085	.00074	.00004	.00209	10.41	.00029
%RSD	267.62	.45290	28.535	.60560	.20682	25.852	703.60	2.3914	113.42
#1	-.00046	.05681	.01230	13.991	.36027	-.00012	.00178	442.73	-.00046
#2	.00014	.05718	.00817	14.111	.35922	-.00018	-.00118	428.00	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00391	.01435	.00584	1.4978	W 209.60	.16428	147.21	.11119	.04380
Stddev	.00028	.00010	.00070	.0148	.53	.00356	.36	.00023	.00003
%RSD	7.2052	.66850	11.949	.98739	.25448	2.1668	.24446	.20797	.07158
#1	.00411	.01442	.00534	1.4874	209.98	.16176	146.95	.11103	.04377
#2	.00371	.01428	.00633	1.5083	209.22	.16679	147.46	.11135	.04382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1481.8	.04764	W 2.1666	.00010	F 251.22	.03190	-.00122	26.235	56.144
Stddev	3.3	.00088	.0121	.00097	1.01	.00356	.00211	.241	.516
%RSD	.22376	1.8451	.55648	997.61	.40021	11.154	172.84	.91932	.91932
#1	1484.1	.04826	2.1580	-.00059	250.51	.02939	.00027	26.065	55.779
#2	1479.5	.04702	2.1751	.00078	251.93	.03442	-.00271	26.406	56.509
Check ?	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit	11.000		-1.0000						
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00080	4.5229	-.00055	.00607	-.00450	-.00666	.00239	.08937	-.00369
Stddev	.00032	.0082	.00099	.00021	.00415	.04171	.00102	.00011	.00094
%RSD	39.555	.18180	179.50	3.5046	92.367	626.32	42.725	.12441	25.625
#1	-.00103	4.5287	-.00125	.00622	-.00156	.02283	.00311	.08944	-.00436
#2	-.00058	4.5170	.00015	.00591	-.00744	-.03615	.00167	.08929	-.00302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2814.1	47184.	6224.8						
Stddev	7.8	18.	69.2						
%RSD	.27734	.03772	1.1110						
#1	2819.6	47197.	6175.9						
#2	2808.6	47172.	6273.7						

Sample Name: 280-69781-N-1-D SD@5 Acquired: 6/1/2015 14:52:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.01122	-.00148	2.7322	.05761	-.00006	.00182	70.385	.00013
Stddev	.00036	.00005	.00515	.1230	.00136	.00004	.00336	1.313	.00003
%RSD	171.66	.47713	347.58	4.5003	2.3620	73.653	184.82	1.8653	24.779
#1	.00005	.01118	.00216	2.6452	.05664	-.00009	.00420	69.456	.00011
#2	-.00047	.01125	-.00512	2.8191	.05857	-.00003	-.00056	71.313	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	.00304	.00318	.24588	32.566	.02947	25.291	.01905	.00653
Stddev	.00019	.00021	.00016	.00953	.493	.00050	.478	.00045	.00031
%RSD	25.523	7.0479	4.8712	3.8765	1.5149	1.6928	1.8885	2.3769	4.6932
#1	.00087	.00289	.00307	.23914	32.217	.02912	24.954	.01873	.00632
#2	.00060	.00320	.00329	.25262	32.915	.02982	25.629	.01937	.00675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	231.45	.01149	.37625	.00514	44.055	.00469	-.00284	4.0209	8.6047
Stddev	4.33	.00013	.01619	.00110	2.050	.00230	.00258	.0981	.2099
%RSD	1.8728	1.1686	4.3024	21.399	4.6521	49.000	91.028	2.4397	2.4397
#1	228.39	.01158	.36480	.00436	42.606	.00631	-.00466	3.9515	8.4562
#2	234.52	.01139	.38769	.00592	45.504	.00306	-.00101	4.0902	8.7531
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00365	.70732	-.00147	.00005	-.00516	-.01973	-.00109	.01528	-.00278
Stddev	.00051	.01295	.00018	.00027	.00111	.00312	.00069	.00052	.00050
%RSD	14.033	1.8312	11.891	543.71	21.595	15.813	63.280	3.4066	18.149
#1	.00329	.69816	-.00135	.00024	-.00595	-.02194	-.00158	.01565	-.00313
#2	.00401	.71648	-.00160	-.00014	-.00437	-.01753	-.00060	.01491	-.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2998.8	49686.	6189.7						
Stddev	2.6	32.	31.5						
%RSD	.08739	.06414	.50819						
#1	3000.6	49664.	6167.5						
#2	2996.9	49709.	6212.0						

Sample Name: 280-69781-N-1-E MS Acquired: 6/1/2015 14:55:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05593	1.9920	W 2.8631	1.0936	W 15.679	2.4498	.05115	F 1.9724	493.78
Stddev	.00007	.0137	.0141	.0084	.064	.0053	.00009	.0027	1.84
%RSD	.13255	.68796	.49279	.76420	.40810	.21569	.17968	.13889	.37232
#1	.05588	2.0017	2.8731	1.0995	15.724	2.4535	.05121	1.9744	495.08
#2	.05599	1.9824	2.8531	1.0877	15.633	2.4460	.05108	1.9705	492.48
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10596	.49244	W 17259	.26820	2.5320	W 271.81	1.2830	204.38	.63442
Stddev	.00049	.00255	.00012	.00049	.0066	.96	.0010	.57	.00124
%RSD	.46131	.51789	.07194	.18094	.26266	.35497	.07534	.27814	.19604
#1	.10631	.49425	.17250	.26854	2.5367	272.49	1.2823	203.98	.63354
#2	.10561	.49064	.17267	.26786	2.5272	271.13	1.2837	204.79	.63530
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0946	W 1595.3	.53053	W 13.604	.46111	F 263.50	.55326	2.0912	34.886
Stddev	.0033	8	.00215	.022	.00701	1.32	.00106	.0048	.174
%RSD	.30049	.04914	.40523	.16102	.5209	.50042	.19189	.22881	.49811
#1	1.0969	1595.8	.53205	13.620	.46607	264.44	.55251	2.0946	35.009
#2	1.0923	1594.7	.52901	13.589	.45615	262.57	.55401	2.0878	34.763
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.657	1.9179	W 5.6676	1.0547	1.0622	1.6519	2.0842	.54442	.61659
Stddev	.372	.0033	.0220	.0000	.0019	.0020	.0205	.00047	.00106
%RSD	.49811	.17273	.38835	.00316	.17864	.12025	.98378	.08610	.17110
#1	74.920	1.9155	5.6831	1.0548	1.0608	1.6533	2.0697	.54475	.61584
#2	74.394	1.9202	5.6520	1.0547	1.0635	1.6505	2.0987	.54409	.61733
Check ?	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.48359								
Stddev	.00051								
%RSD	.10457								
#1	.48394								
#2	.48323								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69781-N-1-E MS Acquired: 6/1/2015 14:55:31 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279426 200.7 (Ca Fe Na SiO₂)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2670.3	44789.	6057.0
Stddev	9.5	384.	21.7
%RSD	.35541	.85764	.35771
#1	2663.5	45060.	6041.7
#2	2677.0	44517.	6072.3

Sample Name: 280-69781-N-1-F MSD Acquired: 6/1/2015 14:59:19 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05657	1.9918	W 2.8925	1.1019	W 15.840	2.4433	.05107	F 1.9806	494.55
Stddev	.00002	.0009	.0083	.0077	.034	.0042	.00002	.0068	.93
%RSD	.04405	.04693	.28723	.70007	.21654	.17207	.04294	.34202	.18800
#1	.05655	1.9924	2.8866	1.1073	15.864	2.4462	.05109	1.9854	495.21
#2	.05658	1.9911	2.8983	1.0964	15.815	2.4403	.05106	1.9758	493.89
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10568	.49299	W 17496	.26771	2.5323	W 272.53	1.2791	203.14	.63146
Stddev	.00041	.00126	.00215	.00025	.0039	.54	.0025	.47	.00105
%RSD	.38451	.25553	1.2274	.09436	.15221	.19994	.19627	.23338	.16693
#1	.10596	.49388	.17648	.26753	2.5350	272.91	1.2809	202.81	.63072
#2	.10539	.49210	.17344	.26788	2.5296	272.14	1.2773	203.48	.63221
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1003	W 1599.9	.53092	W 13.641	.45912	F 265.18	.55890	2.0895	35.084
Stddev	.0034	3.0	.00016	.078	.00100	.35	.01366	.0092	.059
%RSD	.30861	.18760	.03090	.57058	.21692	.13142	2.4433	.44063	.16688
#1	1.1027	1602.0	.53103	13.696	.45842	265.42	.56856	2.0960	35.126
#2	1.0979	1597.8	.53080	13.586	.45983	264.93	.54925	2.0829	35.043
Check ?	Chk Pass	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	75.080	1.9250	W 5.7252	1.0468	1.0625	1.6511	2.0886	.54349	.61057
Stddev	.125	.0107	.0104	.0058	.0002	.0141	.0041	.00155	.00046
%RSD	.16688	.55407	.18179	.55710	.01484	.85404	.19446	.28442	.07606
#1	75.169	1.9325	5.7178	1.0427	1.0624	1.6611	2.0915	.54239	.61090
#2	74.992	1.9175	5.7325	1.0509	1.0626	1.6411	2.0857	.54458	.61024
Check ?	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.48429								
Stddev	.00164								
%RSD	.33812								
#1	.48545								
#2	.48313								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69781-N-1-F MSD Acquired: 6/1/2015 14:59:19 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279426 200.7 (Ca Fe Na SiO2)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2693.3	44996.	5998.9
Stddev	9.3	65.	2.0
%RSD	.34430	.14528	.03382
#1	2699.9	45043.	5997.4
#2	2686.8	44950.	6000.3

Sample Name: 280-69781-N-2-B Acquired: 6/1/2015 15:02:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00101	As1890 ppm .04756	B_2089 ppm W 14.466	Ba4554 ppm .38012	Be3130 ppm -.00007	Bi2230 ppm .00128	Ca3179 ppm 427.58	Cd2288 ppm -.00038
#1	-.00081	.04828	.01784	14.434	.38656	.00000	.00197	438.17	-.00063
#2	-.00121	.04684	.00888	14.498	.37368	-.00014	.00058	416.99	-.00012
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00400	Cu3247 ppm .01417	Fe2599 ppm .00520	K_7664 ppm W 207.02	Li6707 ppm .16675	Mg2790 ppm 147.92	Mn2576 ppm .10853	Mo2020 ppm .04272
#1	.00381	.01415	.00544	1.4789	210.61	.16924	148.21	.10875	.04343
#2	.00419	.01418	.00496	1.4241	203.42	.16425	147.62	.10831	.04200
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1435.5	P_1782 ppm .04898	Pb2203 ppm 1.6228	S_1820 ppm .00043	Sb2068 ppm F 253.36	Se1960 ppm .00077	Si2881 ppm 25.712	SiO2 ppm 55.024
#1	1460.4	.04987	1.6277	.00054	252.66	.03393	-.00070	26.132	55.923
#2	1410.6	.04809	1.6180	.00032	254.07	.03172	.00223	25.292	54.126
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00141	Th2837 ppm 4.5235	Ti3349 ppm -.00139	Tl1908 ppm .00421	U_3701 ppm -.00670	V_2924 ppm W -.05104	Zn2062 ppm .00163	Zr3391 ppm .03914
#1	-.00168	4.5990	-.00191	.00400	-.00722	-.01577	.00177	.03923	-.00514
#2	-.00114	4.4480	-.00087	.00443	-.00619	-.08631	.00148	.03905	-.00210
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2693.2	Y_3774 Cts/S 45436.	377.433 {89}				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	2695.2	45304.	5978.3						
#2	2691.2	45567.	6264.5						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 15:06:18 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00331	Al3092 ppm 51.162	As1890 ppm -.00232	B_2089 ppm .03860	Ba4554 ppm .00099	Be3130 ppm .00002	Bi2230 ppm 1.0086	Ca3179 ppm .04539	Cd2288 ppm -.00025	Co2286 ppm -.00045	Cr2055 ppm .00058
#1	.00294	51.760	-.00034	.03933	.00085	.00003	1.0070	.04433	-.00023	-.00052	.00068
#2	.00369	50.564	-.00429	.03787	.00114	.00001	1.0101	.04646	-.00027	-.00039	.00049
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00016	Fe2714 ppm 50.396	K_7664 ppm .54201	Li6707 ppm .00450	Mg2790 ppm .06257	Mn2576 ppm -.00154	Mo2020 ppm -.00062	Na8183 ppm 252.81	Ni2316 ppm .00217	P_1782 ppm -.00290	Pb2203 ppm .00032
#1	-.00016	50.898	.57262	.00458	.05950	-.00157	-.00051	255.68	.00230	-.00145	-.00010
#2	-.00016	49.893	.51140	.00443	.06563	-.00151	-.00072	249.94	.00203	-.00435	.00075
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm 4.9043	Sb2068 ppm -.00814	Se1960 ppm .00325	Si2881 ppm .01238	SiO2 ppm .02649	Sn1899 ppm -.00385	Sr4077 ppm .00049	Th2837 ppm 5.1333	Ti3349 ppm -.01263	TI1908 ppm .00034	U_3701 ppm W 10.692
#1	4.8971	-0.0730	.00592	.01480	.03167	-.00487	.00051	5.1354	-.01216	-.00090	10.697
#2	4.9114	-.00898	.00059	.00996	.02131	-.00283	.00047	5.1312	-.01310	.00157	10.687
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%	
Elem Units Avg Stddev %RSD	V_2924 ppm .00248	Zn2062 ppm .00069	Zr3391 ppm -.14528								
#1	.00279	.00056	-.14447								
#2	.00217	.00082	-.14609								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2933.6	Y_3600 Cts/S 47993.	Y_3774 Cts/S 5934.4								
#1	2940.4	47903.	5861.3								
#2	2926.7	48083.	6007.6								

Sample Name: CCV-3296664 Acquired: 6/1/2015 15:08:53 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.52144	F .55568	.99775	.53285	.50351	.50395	-.00154	5.1796	.51385	.52033	.45514	.50356
Stddev	.00282	.00096	.00021	.00722	.00012	.00046	.00029	.0193	.00372	.00051	.00191	.00133
%RSD	.54096	.17258	.02105	1.3549	.02295	.09184	19.014	.37208	.72308	.09764	.41933	.26358
#1	.51945	.55501	.99760	.52775	.50359	.50362	-.00133	5.1933	.51122	.51997	.45379	.50450
#2	.52344	.55636	.99790	.53796	.50343	.50427	-.00174	5.1660	.51648	.52069	.45649	.50262

Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass				
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.5764	51.924	1.0367	20.905	.53239	.50538	5.4352	.52223	1.0116	1.0125	-.00578	.98078
Stddev	.0069	.022	.0039	.022	.00069	.00043	.0267	.00100	.0057	.0075	.00017	.01165
%RSD	.26581	.04155	.37220	.10741	.12971	.08518	.49200	.19220	.56885	.73615	3.0090	1.1879
#1	2.5813	51.908	1.0395	20.889	.53190	.50507	5.4541	.52152	1.0075	1.0072	-.00566	.97254
#2	2.5716	51.939	1.0340	20.921	.53288	.50568	5.4163	.52294	1.0157	1.0178	-.00591	.98902

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.96401	5.2917	11.324	1.0191	.50310	-.00339	.52862	1.0161	-.03589	.53454	F .55394	.50887
Stddev	.01197	.0068	.015	.0004	.00051	.00113	.00214	.0078	.02071	.00069	.00341	.00285
%RSD	1.2416	.12846	.12846	.04352	.10154	33.301	.40552	.76920	.57.705	.12848	.61501	.55909
#1	.95555	5.2869	11.314	1.0188	.50346	-.00259	.52711	1.0106	-.05053	.53405	.55153	.51088
#2	.97248	5.2965	11.334	1.0194	.50274	-.00419	.53014	1.0217	-.02124	.53503	.55635	.50686

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	3007.6	49550.	6003.1
Stddev	1.6	25.	2.3
%RSD	.05214		.04999
#1	3006.5		49532.
#2	3008.8		49567.
	6004.7		6001.4

Sample Name: CCB Acquired: 6/1/2015 15:11:22 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	W -00107	-00058	-00275	.02384	.00074	-00002	-00030	.00233	-00013	.00027	.00034
Stddev	.00016	.00001	.00424	.00094	.00029	.00014	.00188	.00476	.00006	.00018	.00017
%RSD	14.593	1.1851	154.21	3.9281	38.930	752.27	623.38	203.96	48.459	68.612	50.737
#1	-.00118	-.00057	.00025	.02450	.00094	.00008	.00103	.00570	-.00008	.00014	.00022
#2	-.00096	-.00058	-.00575	.02317	.00054	-.00012	-.00163	-.00103	-.00017	.00040	.00046
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00100										
Low Limit	-.00100										
Elem Units	Cu3247 ppm	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	.00106	.00410	.40292	.00654	-.00380	.00008	.00005	.20027	-.00006	-.00437	-.00037
Stddev	.00051	.00100	.02324	.00008	.00107	.00013	.00009	.00122	.00021	.00137	.00058
%RSD	48.262	24.491	5.7670	1.2170	28.142	168.08	184.26	.60743	328.80	31.227	157.25
#1	.00070	.00339	.41935	.00660	-.00456	-.00001	.00011	.20113	.00008	-.00341	.00004
#2	.00143	.00481	.38649	.00649	-.00304	.00017	-.00001	.19940	-.00021	-.00534	-.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	-.01148	.00050	F -.00692	.01921	.04112	-.00100	.00009	.00014	-.00040	.00159	-.00339
Stddev	.00252	.00135	.00013	.00611	.01307	.00036	.00003	.00048	.00010	.00092	.03033
%RSD	21.933	268.58	1.9059	31.795	31.795	35.691	30.690	339.40	25.570	58.209	893.78
#1	-.00970	.00146	-.00702	.02353	.05036	-.00075	.00007	-.00020	-.00033	.00224	.01805
#2	-.01327	-.00045	-.00683	.01489	.03187	-.00126	.00011	.00048	-.00048	.00093	-.02484
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	-.00079	-.00053	-.00391								
Stddev	.00046	.00018	.00140								
%RSD	58.200	33.642	35.746								
#1	-.00112	-.00040	-.00292								
#2	-.00047	-.00065	-.00490								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Units	3054.8	50807.	6080.0								
Avg	6.4	59.	22.7								
Stddev	.20894	.11560	.37300								
#1	3050.3	50766.	6064.0								
#2	3059.3	50849.	6096.0								

Sample Name: CCVL3301032II Acquired: 6/1/2015 15:13:45 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm .01030	Al1670 ppm .11573	As1890 ppm .01256	B_2089 ppm .12345	Ba4554 ppm .01074	Be3130 ppm .00090	Bi2230 ppm .10839	Ca3179 ppm .21999	Cd2288 ppm .00519	Co2286 ppm .01089	Cr2055 ppm .00976	Cu3247 ppm .01670
Stddev	.00029	.00164	.00323	.00220	.00036	.00008	.00147	.01009	.00008	.00022	.00006	.00001
%RSD	2.8061	1.4189	25.712	1.7796	3.3919	8.8322	1.3594	4.5857	1.5671	1.9790	.65198	.08800
#1	.01051	.11689	.01028	.12500	.01048	.00084	.10943	.21286	.00525	.01074	.00981	.01669

#2	.01010	.11457	.01484	.12189	.01100	.00095	.10735	.22713	.00514	.01104	.00972	.01671
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Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm .10356	K_7664 ppm 3.5409	Li6707 ppm F.01573	Mg2790 ppm .22649	Mn2576 ppm .01139	Mo2020 ppm .01984	Na5895 ppm .12223	Ni2316 ppm .04315	P_1782 ppm 3.0207	Pb2203 ppm .00932	S_1820 ppm -.01059	Sb2068 ppm .00931
Stddev	.00364	.1144	.00028	.00050	.00001	.00059	.0205	.00099	.0323	.00052	.00082	.00082
%RSD	3.5151	3.2310	1.7697	.21925	.05450	2.9665	1.6806	2.2862	1.0707	5.6256	7.7503	8.8087
#1	.10099	3.4600	.01592	.22685	.01139	.02026	1.2078	.04385	3.0436	.00895	-.01117	.00873
#2	.10614	3.6218	.01553	.22614	.01139	.01943	1.2369	.04245	2.9978	.00969	-.01001	.00989

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
			30.000%									

Elem Units	Se1960 ppm F.00974	Si2881 ppm .52841	SiO2 ppm 1.1308	Sn1899 ppm .10576	Sr4077 ppm .01047	Th2837 ppm .01431	Ti3349 ppm .00989	Tl1908 ppm .01841	U_3701 ppm F.08666	V_2924 ppm .00996	Zn2062 ppm .02487	Zr3391 ppm F.00999
Stddev	.00341	.00499	.0107	.00370	.00027	.00061	.00030	.00060	.01500	.00007	.00007	.00029
%RSD	35.024	.94341	.94341	3.5008	2.5619	4.2863	3.0694	3.2440	17.307	.67753	.29896	2.9422
#1	.01215	.52488	1.1232	.10838	.01028	.01387	.00968	.01883	.07605	.01001	.02482	.01020
#2	.00733	.53193	1.1383	.10314	.01066	.01474	.01011	.01799	.09726	.00992	.02493	.00978

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Fail .01500						
									30.000%			-30.000%

Int. Std. Units	Y_2243 Cts/S 3075.5	Y_3600 Cts/S 50839.	Y_3774 Cts/S 6229.5									
Avg	2.4	160.	111.4									
Stddev	.07834	.31505	1.7881									
%RSD												
#1	3073.8	50726.	6308.3									
#2	3077.2	50952.	6150.8									

Sample Name: 280-69844-L-1-A Acquired: 6/1/2015 15:16:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00016	As1890 ppm .00416	B_2089 ppm .02705	W 14.255 W .29595	Ba4554 ppm .00007	Be3130 ppm .00057	Bi2230 ppm .430.09	Ca3179 ppm .00034	Cd2288 ppm .00012
#1	-.00006	.00462	.02752	14.271	.29739	-.00002	.00122	430.34	-.00042	
#2	-.00026	.00369	.02658	14.240	.29450	-.00011	-.00236	429.83	-.00026	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00439	Cu3247 ppm .01257	Fe2599 ppm .00618	K_7664 ppm W .28837	Li6707 ppm W .207.08	Mg2790 ppm .16369	Mn2576 ppm .148.28	Mo2020 ppm .14957	ppm .05084
#1	.00447	.01264	.00671	.29130	207.80	.16356	147.72	.15034	.05113	
#2	.00430	.01251	.00565	.28543	206.36	.16382	148.84	.14880	.05055	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1427.0	P_1782 ppm .05145	Pb2203 ppm W 3.5087	S_1820 ppm F -.00026	Sb2068 ppm F .03262	Se1960 ppm F -.00044	Si2881 ppm F .26.472	SiO2 ppm F .56.650	ppm F .011
#1	1432.8	.05188	3.5309	-.00168	254.23	.03285	-.00011	26.480	56.667	
#2	1421.3	.05102	3.4864	.00116	253.61	.03239	-.00077	26.464	56.632	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00007	Th2837 ppm 4.3922	Ti3349 ppm .00135	Tl1908 ppm -.00016	U_3701 ppm -.00955	V_2924 ppm -.04141	Zn2062 ppm .01523	Zr3391 ppm .04441	ppm -.00419
#1	.00156	4.4137	.00107	-.00005	-.01183	-.04099	.01493	.04328	-.00388	
#2	-.00142	4.3706	.00163	-.00026	-.00727	-.04182	.01553	.04555	-.00450	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2648.9	Y_3774 Cts/S 43861.	377.433 {89}	5803.1	5803.1	292.402 {115}	206.200 {163}	339.198 {99}	ppm 0.0044
#1	2651.4	44024.	5828.5							
#2	2646.3	43698.	5777.8							

Sample Name: 280-69844-L-2-A Acquired: 6/1/2015 15:20:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00027	As1890 ppm .15961	B_2089 ppm .05239	W 14.770 W .076	Ba4554 ppm .94281	Be3130 ppm -.00010	Bi2230 ppm .00445	Ca3179 ppm 449.24	Cd2288 ppm -.00032
#1	-.00032	.15960	.05964	14.823	.93576	-.00007	.00357	444.46	-.00029	
#2	-.00022	.15961	.04514	14.716	.94985	-.00013	.00532	454.02	-.00035	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00599	Cu3247 ppm .02417	Fe2599 ppm .00865	K_7664 ppm 28.549	Li6707 ppm W 208.87	Mg2790 ppm .16860	Mn2576 ppm 153.73	Mo2020 ppm 1.2080	ppm .05720
#1	.00614	.02366	.00869	28.338	207.07	.16677	154.10	1.2092	.05750	
#2	.00585	.02468	.00860	28.760	210.66	.17044	153.35	1.2067	.05689	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.000 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1227.1	P_1782 ppm .05286	Pb2203 ppm 1.1489	S_1820 ppm .00094	Sb2068 ppm F 253.00	Se1960 ppm .03382	Si2881 ppm .00473	SiO2 ppm 28.231	ppm 60.415
#1	1216.8	.05279	1.1534	.00239	253.23	.03467	.00200	28.102	60.137	
#2	1237.4	.05294	1.1443	-.00051	252.77	.03297	.00746	28.361	60.692	
Check ? High Limit Low Limit	Chk Warn 500.000 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.000 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00028	Th2837 ppm 4.7742	Ti3349 ppm .00010	Tl1908 ppm .02605	U_3701 ppm W -.01123	V_2924 ppm -.04197	Zn2062 ppm .02109	Zr3391 ppm .03488	ppm -.00438
#1	.00123	4.7387	-.00182	.02602	-.00662	-.00801	.02037	.03567	-.00463	
#2	-.00067	4.8097	.00202	.02607	-.01584	-.07593	.02182	.03409	-.00413	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.00000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2661.9	Y_3774 Cts/S 44013.	377.433 {89}	5843.2	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	ppm ppm 28.9
#1	2641.4	43881.	5906.5							
#2	2682.3	44146.	5780.0							

Sample Name: 280-69844-L-3-A Acquired: 6/1/2015 15:24:09 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279426 200.7 (Ca Fe Na SiO2)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.07818	.04925	W 16.291	1.3605	-0.0008	.00445	W 553.63	-.00074
Stddev	.00032	.00020	.01063	.012	.0208	.00003	.00138	4.31	.00049
%RSD	214.56	.25239	21.576	.07477	1.5302	29.910	30.936	.77805	66.495
#1	.00038	.07804	.04174	16.282	1.3458	-.00007	.00348	550.58	-.00039
#2	-.00008	.07832	.05677	16.299	1.3752	-.00010	.00542	556.68	-.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Warn 500.00 -.05000	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00359	.01934	.00793	22.119	W 278.19	.16597	187.11	1.5284	.03890
Stddev	.00054	.00017	.00015	.378	4.48	.00027	.24	.0002	.00110
%RSD	15.180	.86406	1.8916	1.7082	1.6092	.16225	.13066	.01074	2.8312
#1	.00397	.01922	.00803	21.851	275.03	.16578	186.93	1.5285	.03968
#2	.00320	.01945	.00782	22.386	281.36	.16616	187.28	1.5283	.03812
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 100.00 -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1443.6	.04965	.68541	.00117	F 259.08	.02902	.00076	27.987	.59.893
Stddev	22.1	.00014	.00198	.00019	.16	.00010	.00584	.547	1.170
%RSD	1.5278	.28028	.28945	16.643	.06343	.33940	766.03	1.9535	1.9535
#1	1428.0	.04955	.68682	.00130	259.20	.02908	.00489	27.601	59.065
#2	1459.2	.04975	.68401	.00103	258.97	.02895	-.00337	28.374	60.720
Check ?	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	W 5.0860	-.00065	.01352	-.00949	-.01642	.00720	.00997	-.00312
Stddev	.00097	.0796	.00072	.00012	.00036	.06401	.00071	.00130	.00089
%RSD	241.31	1.5659	110.86	.90900	3.7872	389.93	9.8561	13.048	28.385
#1	.00109	5.0297	-.00116	.01361	-.00923	.02885	.00771	.00905	-.00250
#2	-.00028	5.1423	-.00014	.01343	-.00974	-.06168	.00670	.01089	-.00375
Check ?	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2630.5	44091.	6008.5						
Stddev	2.9	102.	138.8						
%RSD	.11028	.23094	2.3100						
#1	2628.4	44163.	6106.6						
#2	2632.5	44019.	5910.3						

Sample Name: 280-69777-A-3-A @5 Acquired: 6/1/2015 15:28:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:

Comment: 279412 6010B (Mo Zn) 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05739	36.973	1.3990	.49704	1.0825	.01267	F .35967	290.93	1.2664
Stddev	.00001	.774	.0541	.01116	.0198	.00012	.00938	3.35	.0428
%RSD	.01573	2.0940	3.8664	2.2458	1.8289	.93552	2.6076	1.1521	3.3789
#1	.05739	36.426	1.3607	.48914	1.0685	.01259	.35303	288.56	1.2361
#2	.05740	37.521	1.4372	.50493	1.0965	.01276	.36630	293.30	1.2966
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.6546	F 4.0625	6.6783	182.86	19.080	.08615	57.371	W 11.985	W 13.046
Stddev	.0825	.1455	.1008	3.92	.223	.00481	1.047	.312	.411
%RSD	3.1064	3.5825	1.5097	2.1438	1.1692	5.5882	1.8245	2.6028	3.1514
#1	2.5963	3.9596	6.6070	180.09	18.923	.08274	56.630	11.764	12.755
#2	2.7130	4.1654	6.7496	185.63	19.238	.08955	58.111	12.205	13.337
Check ?	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn
High Limit	1.0000	1.0000					10.000	5.0000	
Low Limit	-.01000	-.02000					-.01000	-.01000	
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	236.40	1.6244	W 4.7893	W 21.897	104.08	.45151	.10190	33.201	71.050
Stddev	3.42	.0496	.1992	.665	3.58	.01838	.00581	.368	.787
%RSD	1.4480	3.0554	4.1593	3.0357	3.4380	4.0699	5.7043	1.1070	1.1070
#1	233.98	1.5893	4.6485	21.427	101.55	.43851	.09779	32.941	70.494
#2	238.82	1.6595	4.9302	22.367	106.61	.46450	.10601	33.461	71.607
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000	10.000					
Low Limit			-.1.0000	-.00300					
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3.1345	1.3876	.03890	.88883	.00819	F -.13774	.26275	F 87.290	.02607
Stddev	.1261	.0257	.00050	.01746	.00306	.00971	.00442	1.662	.00125
%RSD	4.0228	1.8497	1.2953	1.9643	37.432	7.0487	1.6814	1.9039	4.8039
#1	3.0453	1.3695	.03855	.87649	.01035	-.14460	.25963	86.115	.02518
#2	3.2236	1.4058	.03926	.90118	.00602	-.13087	.26587	88.465	.02696
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit	2.0000					50.000		50.000	
Low Limit	-.05000					-.10000		-.02000	
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2891.1	47809.	5961.8						
Stddev	11.3	190.	1.4						
%RSD	.38950	.39808	.02294						
#1	2883.1	47944.	5960.8						
#2	2899.1	47674.	5962.7						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 15:30:35 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00320	Al3092 ppm 50.438	As1890 ppm .00186	B_2089 ppm .03072	Ba4554 ppm .00104	Be3130 ppm .00004	Bi2230 ppm .95934	Ca3179 ppm .05359	Cd2288 ppm -.00015	Co2286 ppm -.00027	Cr2055 ppm .00084
#1	.00293	50.033	.00386	.03144	.00060	-.00002	.96040	.06826	-.00022	-.00036	.00086
#2	.00348	50.844	-.00014	.03000	.00147	.00011	.95828	.03892	-.00008	-.00018	.00082
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00043	Fe2714 ppm 49.425	K_7664 ppm .42096	Li6707 ppm .00415	Mg2790 ppm .04947	Mn2576 ppm -.00138	Mo2020 ppm .00305	Na8183 ppm 248.64	Ni2316 ppm .00214	P_1782 ppm -.00110	Pb2203 ppm -.00025
#1	110.30	1.8845	10.374	25.646	6.4288	.04749	26.232	1.4983	10.397	44.190	1684.5
#2	-.00009	48.767	.39008	.00340	.04723	-.00138	.00248	246.00	.00230	-.00076	.00268
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm W 4.7212	Sb2068 ppm -.00666	Se1960 ppm .00136	Si2881 ppm .09217	SiO2 ppm .19723	Sn1899 ppm -.00372	Sr4077 ppm .00052	Th2837 ppm 5.0156	Ti3349 ppm -.01242	TI1908 ppm .00120	U_3701 ppm 10.328
#1	4.6912	-00377	.00038	.08563	.18326	-.00437	.00053	5.0222	-.01255	.00207	10.347
#2	4.7512	-.00954	.00233	.09870	.21121	-.00307	.00051	5.0091	-.01230	.00033	10.310
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00181	Zn2062 ppm .00102	Zr3391 ppm -.13752								
#1	.00169	.00137	-.13899								
#2	.00192	.00067	-.13604								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2935.3	Y_3600 Cts/S 47827.	Y_3774 Cts/S 5782.5								
#1	2937.2	47868.	5857.0								
#2	2933.4	47785.	5708.0								

Sample Name: CCV-3296664 Acquired: 6/1/2015 15:33:10 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.50608	.54005	.96617	.50863	.47985	.48181	-.00032	.50059	.48968	.51738	F .43807	.48519
Stddev	.00307	.00196	.00575	.00243	.01019	.01090	.00103	.1133	.00193	.00351	.00361	.00112
%RSD	.60648	.36339	.59462	.47737	2.1226	2.2629	326.30	2.2639	.39445	.67916	.82435	.23115
#1	.50825	.54144	.97023	.51034	.47265	.47410	.00041	4.9258	.49105	.51490	.43552	.48599
#2	.50391	.53866	.96211	.50691	.48705	.48952	-.00105	5.0860	.48831	.51987	.44063	.48440

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass					
											-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.5118	49.961	.98788	20.544	.52390	.49827	5.2332	.51650	.98623	.98779	-.00412	.93888
Stddev	.0447	1.032	.02348	.071	.00000	.00218	.1062	.00284	.00217	.00743	.00332	.00205
%RSD	1.7793	2.0660	2.3773	.34375	.00054	.43724	2.0298	.54902	.21959	.75257	80.631	.21820
#1	2.4802	49.231	.97127	20.594	.52390	.49673	5.1580	.51449	.98470	.98254	-.00646	.94032
#2	2.5434	50.691	1.0045	20.494	.52390	.49981	5.3083	.51850	.98776	.99305	-.00177	.93743

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.92431	5.1513	11.024	.99670	.48134	-.00369	.51317	.99031	.00308	.52044	F .55422	.49029
Stddev	.00190	.1403	.300	.00551	.01020	.00099	.00051	.00566	.00688	.00126	.00193	.01107
%RSD	.20537	2.7230	2.7230	.55240	2.1198	26.854	.09997	.57160	223.34	.24228	.34793	2.2578
#1	.92566	5.0521	10.811	.99281	.47412	-.00440	.51354	.98631	.00795	.52133	.55285	.48246
#2	.92297	5.2505	11.236	1.0006	.48855	-.00299	.51281	.99432	-.00178	.51955	.55558	.49811

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail .50000	Chk Pass				
											10.490%	

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2937.9	47750.	5785.4
Stddev	4.7	41.	109.9
%RSD			
#1	2934.6		47779.
#2	2941.2		47721.
	5863.1		5707.7

Sample Name: CCB Acquired: 6/1/2015 15:35:39 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0024	-0.0006	.0012	.02068	.00024	-0.0010	.00338	.00620	-0.00035	.00030	.00018
Stddev	.00019	.00019	.00222	.00053	.00013	.00005	.00210	.00417	.00033	.00003	.00000
%RSD	80.624	319.51	198.73	2.5788	56.250	49.504	61.981	67.250	94.692	9.3034	.59344
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.00014	.31664	.00252	.00105	.00012	-0.0009	.16618	-0.0017	-0.0962	-0.00217
Stddev	.00062	.00180	.01497	.00154	.00213	.00002	.00017	.00692	.00018	.00019	.00016
%RSD	97.745	1315.1	4.7288	61.282	203.35	16.351	191.87	4.1666	106.51	2.0170	7.5718
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.1119	-0.0052	F -0.00529	.02513	.05378	-0.00187	.00013	-0.00061	-0.00089	.00072	-0.00069
Stddev	.00264	.00296	.00350	.01533	.03282	.00091	.00007	.00107	.00007	.00225	.00293
%RSD	23.637	563.81	66.208	61.014	61.014	48.782	56.512	175.72	8.1552	312.15	426.15
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00048	-.00016	-.00508								
Stddev	.00065	.00055	.00204								
%RSD	134.74	351.61	40.202								
#1											
#2											
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2958.5	48179.	5650.8								
Stddev	2.6	183.	18.5								
%RSD	.0827	.37954	.32705								
#1											
#2											

Sample Name: CCVL3301032II Acquired: 6/1/2015 15:37:59 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01029	.11278	.01156	.11668	.01051	.00087	.10239	.21996	.00506	.01076	.00923	.01607
Stddev	.00002	.00100	.00019	.00141	.00014	.00013	.00055	.00296	.00017	.00049	.00022	.00049
%RSD	.16091	.89091	1.6243	1.2065	1.2966	15.068	.53807	1.3468	3.2906	4.5171	2.3940	3.0237

#1	.01030	.11349	.01143	.11767	.01061	.00097	.10278	.22206	.00518	.01041	.00907	.01573
#2	.01028	.11207	.01169	.11568	.01041	.00078	.10200	.21787	.00494	.01110	.00939	.01641

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10422	3.5586	.01284	.22752	.01124	.01926	1.2417	.04344	2.8935	.00782	-.00532	.00874
Stddev	.00188	.0023	.00108	.00614	.00003	.00082	.0087	.00047	.0254	.00149	.00254	.00211
%RSD	1.8085	.06580	8.3774	2.6988	.26899	4.2481	.69728	1.0897	.87793	19.052	47.792	24.132
#1	.10289	3.5603	.01360	.23186	.01122	.01984	1.2356	.04378	2.9114	.00676	-.00352	.00725
#2	.10556	3.5570	.01208	.22318	.01126	.01868	1.2479	.04311	2.8755	.00887	-.00712	.01023

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01139	.55412	1.1858	.10091	.01047	.01550	.00958	.01420	F .03768	.01000	.02482	F .00757
Stddev	.00906	.00612	.0131	.00001	.00000	.00035	.00075	.00105	.03166	.00046	.00195	.00146
%RSD	79.484	1.1043	1.1043	.01481	.04025	2.2805	7.7889	7.4244	84.002	4.6213	7.8414	19.304
#1	.00499	.54979	1.1766	.10092	.01048	.01525	.00905	.01494	.01530	.00968	.02344	.00654
#2	.01780	.55845	1.1951	.10090	.01047	.01575	.01010	.01345	.06007	.01033	.02620	.00860

Check ? Value Range	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Fail .01500							
									-30.000%			-30.000%

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2974.6	48843.	5731.7
Stddev	1.2	30.	2.5
%RSD	.04169	.06241	.04444
#1	2975.5	48865.	5729.9
#2	2973.8	48822.	5733.5

Sample Name: MB 280-279562/1-A Acquired: 6/1/2015 15:40:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 6/1 Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00372	-.00447	.01503	.00043	-.00005	-.00185	.01822	-.00001
Stddev	.00042	.00036	.00256	.00055	.00006	.00000	.00222	.00028	.00011
%RSD	1106.9	9.7304	57.226	3.6542	14.761	.95994	119.93	1.5435	1302.0
#1	.00026	.00346	-.00628	.01542	.00038	-.00005	-.00343	.01841	.00007
#2	-.00034	.00398	-.00266	.01464	.00047	-.00005	-.00028	.01802	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.00000	.00122	.02294	.33719	.00003	.00119	.00041	-.00022
Stddev	.00013	.0000	.00067	.00095	.05520	.00135	.01337	.00001	.00008
%RSD	87.263	11334.	54.858	4.1575	16.371	4939.7	1122.4	1.7020	36.990
#1	-.00006	.00000	.00075	.02226	.37622	.00098	-.00826	.00042	-.00027
#2	-.00025	.00000	.00169	.02361	.29816	-.00092	.01064	.00041	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10715	.00024	-.00641	-.00094	-.00360	-.00135	-.00616	.02995	.06410
Stddev	.00706	.00004	.00049	.00057	.00139	.00091	.00160	.01701	.03640
%RSD	6.5887	16.352	7.7160	60.668	38.733	67.328	25.963	56.778	56.778
#1	.11214	.00021	-.00606	-.00054	-.00261	-.00199	-.00729	.04198	.08984
#2	.10216	.00027	-.00676	-.00135	-.00458	-.00071	-.00503	.01793	.03837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00139	.00013	-.00127	.00002	.00040	-.01859	-.00096	.00102	-.00516
Stddev	.00106	.00003	.00037	.00037	.00084	.02201	.00002	.00037	.00250
%RSD	76.176	23.338	29.353	2230.2	210.93	118.37	2.2816	36.436	48.520
#1	-.00214	.00011	-.00154	-.00025	-.00020	-.03416	-.00098	.00129	-.00693
#2	-.00064	.00015	-.00101	.00028	.00099	-.00303	-.00095	.00076	-.00339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2969.3	49091.	5838.3						
Stddev	2.8	106.	102.2						
%RSD	.09572	.21667	1.7503						
#1	2971.3	49016.	5910.5						
#2	2967.3	49166.	5766.0						

Sample Name: LCS 280-279562/2-A Acquired: 6/1/2015 15:43:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.04969	2.0443	.95489	.97517	1.8928	.04781	1.8692	47.699	.09810
#2	.05004	2.0387	.96251	.97586	1.8707	.04714	1.8694	47.093	.09811
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.49645	.16696	.24443	.96973	49.654	.98270	50.309	.51547	1.0278
#2	.49634	.16713	.24408	.95597	49.084	.96821	50.180	.51457	1.0238
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	50.331	.49546	9.9452	.48570	1.8595	.49266	1.8960	10.088	21.589
#2	50.553	.49498	9.9244	.48935	1.8509	.48021	1.8526	10.126	21.670
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0174	.94694	1.0080	1.0128	1.9646	2.0164	.51639	.52900	.45330
#2	1.9686	.93564	1.0023	1.0129	1.9253	2.0395	.51276	.53015	.45898
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2858.0	46718.	5783.5						
#2	2867.7	46929.	5868.1						

Sample Name: 280-69870-C-1-D Acquired: 6/1/2015 15:45:25 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0021	.01083	-.00034	.02941	.12158	-0.0002	-0.0047	185.13	-0.0014
Stddev	.00008	.00086	.00450	.00033	.00092	.00010	.00511	.84	.00022
%RSD	40.299	7.9453	1317.0	1.1238	.76075	504.67	1080.8	.45377	156.24
#1	-.00015	.01023	.00284	.02917	.12092	.00005	-.00409	184.54	.00001
#2	-.00027	.01144	-.00352	.02964	.12223	-.00009	.00314	185.73	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.00072	.00223	.04762	1.9983	.00877	44.563	.00253	-.00193
Stddev	.00004	.00005	.00054	.00326	.0170	.00019	.025	.00005	.00043
%RSD	123.29	7.3899	24.240	6.8556	.85188	2.1584	.05620	1.8452	22.138
#1	.00000	.00068	.00261	.04531	2.0103	.00890	44.580	.00256	-.00163
#2	-.00006	.00076	.00185	.04992	1.9862	.00863	44.545	.00250	-.00224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	105.31	.00438	.01191	.00474	6.7080	.00028	.00131	6.4782	13.863
Stddev	.15	.00002	.00491	.00118	.0015	.00609	.00232	.0073	.016
%RSD	.14607	.55392	41.194	24.975	.02282	2144.8	178.04	.11282	.11282
#1	105.20	.00440	.00844	.00558	6.7091	.00459	.00295	6.4834	13.874
#2	105.42	.00437	.01538	.00390	6.7069	-.00402	-.00034	6.4731	13.852
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	2.7538	.00161	-.00029	-.00943	-.02902	-.00065	-.00025	-.00580
Stddev	.00044	.0174	.00132	.00007	.00241	.01764	.00024	.00017	.00043
%RSD	482.32	.63235	82.131	24.510	25.547	60.773	36.825	70.300	7.4609
#1	.00040	2.7415	.00068	-.00035	-.01114	-.04149	-.00048	-.00037	-.00611
#2	-.00022	2.7661	.00255	-.00024	-.00773	-.01655	-.00082	-.00012	-.00550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2790.3	46056.	5831.9						
Stddev	8.7	197.	1.7						
%RSD	.31331	.42677	.02914						
#1	2796.5	46195.	5830.7						
#2	2784.1	45917.	5833.1						

Sample Name: 280-69870-C-1-D SD@5 Acquired: 6/1/2015 15:48:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00121	.00187	-.00516	.01360	.02327	-.00013	-.00111	35.655	-.00041
#2	.00093	.00189	.00070	.01369	.02438	-.00010	.00171	36.856	-.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00051	.00052	.00112	.01140	.64177	.00491	8.9396	.00076	-.00149
#2	.00063	.00045	.00150	.01579	.67071	.00311	9.0474	.00089	-.00181
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	18.426	.00362	-.00303	.00192	1.3019	.00151	-.00667	1.2273	2.6265
#2	19.308	.00228	-.00073	-.00078	1.3350	.00215	-.00705	1.3052	2.7931
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00602	.52346	-.00053	-.00045	-.00210	-.01827	-.00131	.00012	-.00399
#2	.00452	.54081	.00239	-.00076	-.00309	-.04593	-.00093	-.00002	-.00577
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2856.1	46965.	5657.6						
#2	2864.3	46736.	5533.2						

Sample Name: 280-69870-C-1-E MS Acquired: 6/1/2015 15:50:45 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05225	2.0074	W 2.3764	.97080	.99319	2.0330	.04783	F 1.8721	241.83
Stddev	.00045	.0020	.0181	.00737	.00147	.0158	.00068	.0064	2.20
%RSD	.86575	.09846	.76235	.75866	.14794	.77630	1.4301	.34289	.91165
#1	.05257	2.0060	2.3636	.97601	.99215	2.0219	.04734	1.8675	240.27
#2	.05193	2.0088	2.3892	.96559	.99423	2.0442	.04831	1.8766	243.39
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09865	.48487	W .16011	.24518	1.0064	52.964	1.0132	95.788	.51280
Stddev	.00012	.00004	.00053	.00057	.0087	.544	.0068	.164	.00047
%RSD	.11699	.00762	.33137	.23122	.86774	1.0269	.67521	.17077	.09234
#1	.09857	.48485	.15973	.24558	1.0002	52.579	1.0084	95.672	.51246
#2	.09873	.48490	.16048	.24478	1.0126	53.348	1.0180	95.904	.51313
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0280	159.56	.48467	W 10.304	.47266	8.9308	.48574	1.8713	17.006
Stddev	.0019	1.47	.00057	.048	.00003	.0266	.00553	.0009	.046
%RSD	.18253	.91984	.11731	.46159	.00566	.29804	1.1389	.04720	.26919
#1	1.0267	158.52	.48427	10.270	.47264	8.9119	.48183	1.8720	16.974
#2	1.0294	160.60	.48507	10.337	.47268	8.9496	.48965	1.8707	17.039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.393	1.9327	3.8642	1.0121	1.0195	1.8061	2.0520	.52125	.52306
Stddev	.098	.0066	.0329	.0007	.0001	.0023	.0381	.00048	.00070
%RSD	.26919	.34022	.85199	.07333	.01059	.12858	1.8561	.09270	.13290
#1	36.324	1.9281	3.8409	1.0115	1.0194	1.8045	2.0251	.52091	.52257
#2	36.463	1.9374	3.8875	1.0126	1.0195	1.8077	2.0789	.52160	.52356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45511								
Stddev	.00147								
%RSD	.32359								
#1	.45615								
#2	.45407								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69870-C-1-E MS Acquired: 6/1/2015 15:50:45 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279562 200.7 (Al Cu Fe Zn)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2757.1	45236.	5649.2
Stddev	2.1	49.	55.4
%RSD	.07489	.10851	.98155
#1	2755.6	45201.	5688.4
#2	2758.6	45270.	5609.9

Sample Name: 280-69870-C-1-F MSD Acquired: 6/1/2015 15:53:08 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05103	1.9980	W 2.3775	.96482	.98835	2.0467	.04803	F 1.8495	245.33
Stddev	.00082	.0024	.0279	.00204	.00273	.0254	.00002	.0075	3.37
%RSD	1.6126	.11793	1.1758	.21129	.27646	1.2391	.04912	.40664	1.3752
#1	.05161	1.9997	2.3973	.96627	.99028	2.0646	.04801	1.8548	247.71
#2	.05045	1.9963	2.3577	.96338	.98642	2.0287	.04804	1.8442	242.94
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09845	.48366	W .16058	.24532	1.0149	53.046	1.0145	96.223	.51252
Stddev	.00080	.00174	.00007	.00017	.0073	.648	.0086	.080	.00012
%RSD	.81332	.35917	.04517	.06936	.72179	1.2214	.84232	.08307	.02338
#1	.09902	.48488	.16063	.24544	1.0201	53.504	1.0206	96.166	.51243
#2	.09789	.48243	.16053	.24519	1.0097	52.587	1.0085	96.279	.51260
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0275	160.80	.48257	W 10.270	.46643	8.9957	.48919	1.8922	17.115
Stddev	.0003	2.35	.00090	.030	.00055	.0218	.00176	.0038	.038
%RSD	.03088	1.4632	.18667	.29199	.11769	.24263	.36063	.20125	.22096
#1	1.0277	162.47	.48321	10.291	.46605	9.0111	.49044	1.8949	17.088
#2	1.0273	159.14	.48194	10.248	.46682	8.9802	.48795	1.8895	17.141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.625	1.9671	3.9275	1.0146	1.0222	1.8219	2.0442	.52038	.51645
Stddev	.081	.0062	.0486	.0001	.0013	.0073	.0215	.00102	.00151
%RSD	.22096	.31607	1.2365	.01368	.13128	.39788	1.0539	.19529	.29210
#1	36.568	1.9627	3.9618	1.0147	1.0213	1.8270	2.0290	.51966	.51538
#2	36.683	1.9715	3.8931	1.0145	1.0232	1.8167	2.0595	.52110	.51752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45844								
Stddev	.00008								
%RSD	.01786								
#1	.45850								
#2	.45839								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69870-C-1-F MSD Acquired: 6/1/2015 15:53:08 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279562 200.7 (Al Cu Fe Zn)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2771.8	45773.	5752.4
Stddev	9.3	47.	110.9
%RSD	.33578	.10353	1.9287
#1	2765.2	45806.	5674.0
#2	2778.4	45739.	5830.9

Sample Name: 280-69870-C-2-B Acquired: 6/1/2015 15:55:32 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.14165	-.00493	.02446	.13586	-.00006	.00218	175.16	.00006
Stddev	.00034	.00061	.00174	.00115	.00304	.00008	.00069	4.42	.00027
%RSD	797.26	.42989	35.340	4.6902	2.2339	132.61	31.556	2.5228	470.11
#1	.00028	.14122	-.00370	.02365	.13372	.00000	.00169	172.04	.00025
#2	-.00020	.14208	-.00616	.02527	.13801	-.00012	.00267	178.29	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00072	.00169	.69956	2.0460	.00586	42.761	.08164	-.00121
Stddev	.00019	.00009	.00054	.01960	.0702	.00178	.011	.00077	.00019
%RSD	125.18	12.474	32.145	2.8014	3.4333	30.354	.02609	.94738	15.320
#1	.00029	.00065	.00131	.68570	1.9963	.00460	42.753	.08219	-.00108
#2	.00002	.00078	.00208	.71342	2.0956	.00712	42.769	.08110	-.00134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	116.50	.00408	.02137	.00438	6.8299	.00566	.00092	6.9744	14.925
Stddev	.58	.00013	.00118	.00086	.0143	.00262	.00385	3612	.773
%RSD	.49361	3.0739	5.5123	19.586	.20884	46.221	419.50	5.1793	5.1793
#1	116.09	.00416	.02053	.00378	6.8400	.00381	-.00180	6.7189	14.379
#2	116.91	.00399	.02220	.00499	6.8199	.00752	.00364	7.2298	15.472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00039	2.7432	-.00041	.00312	-.00771	-.01079	.00006	.00218	-.00579
Stddev	.00113	.0708	.00132	.00022	.00003	.06358	.00012	.00086	.00231
%RSD	290.85	2.5818	323.20	7.1729	.44080	589.44	197.56	39.409	39.894
#1	-.00119	2.6931	-.00134	.00296	-.00774	.03417	-.00002	.00157	-.00416
#2	.00041	2.7933	.00053	.00328	-.00769	-.05575	.00014	.00278	-.00743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2829.2	47108.	5778.6						
Stddev	2.8	9.	172.0						
%RSD	.09873	.01844	2.9758						
#1	2831.2	47114.	5900.2						
#2	2827.2	47101.	5657.0						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 15:58:10 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00326	Al3092 ppm 50.478	As1890 ppm .00137	B_2089 ppm .00688	Ba4554 ppm .00096	Be3130 ppm .00016	Bi2230 ppm .96058	Ca3179 ppm .03418	Cd2288 ppm -.00005	Co2286 ppm -.00052	Cr2055 ppm .00075
#1	.00292	50.857	.00073	.00614	.00088	.00010	.95829	.03822	.00000	-.00066	.00041
#2	.00360	50.099	.00201	.00761	.00105	.00022	.96286	.03013	-.00009	-.00038	.00108
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00108	Fe2714 ppm 48.474	K_7664 ppm .32870	Li6707 ppm .00341	Mg2790 ppm .06256	Mn2576 ppm -.00154	Mo2020 ppm -.00104	Na8183 ppm 247.88	Ni2316 ppm .00255	P_1782 ppm -.00110	Pb2203 ppm -.00158
#1	-.00146	48.434	.30932	.00427	.06556	-.00144	-.00104	249.76	.00248	-.00142	-.00162
#2	-.00070	48.515	.34809	.00254	.05957	-.00163	-.00104	246.01	.00262	-.00078	-.00153
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm W 4.6394	Sb2068 ppm -.01008	Se1960 ppm .00330	Si2881 ppm -.01935	SiO2 ppm -.04141	Sn1899 ppm -.00228	Sr4077 ppm .00052	Th2837 ppm 5.0021	Ti3349 ppm -.01237	Tl1908 ppm .00273	U_3701 ppm 10.272
#1	4.6212	-.01227	.00318	-.02581	-.05524	-.00231	.00056	5.0068	-.01327	.00059	10.174
#2	4.6576	-.00789	.00342	-.01289	-.02759	-.00226	.00048	4.9975	-.01147	.00487	10.369
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00211	Zn2062 ppm -.00076	Zr3391 ppm -.14299								
#1	.00197	-.00159	-.14181								
#2	.00225	.00006	-.14417								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2914.7	Y_3600 Cts/S 47860.	Y_3774 Cts/S 5751.3								
#1	2926.7	47625.	5709.2								
#2	2902.6	48096.	5793.3								

Sample Name: CCV-3296664 Acquired: 6/1/2015 16:00:46 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.50678	.54148	.96191	.48558	.46843	.47232	.00492	.48643	.49142	.51540	F .43155	.48364
Stddev	.00185	.00117	.00042	.00084	.00118	.00081	.00008	.0061	.00156	.00208	.00302	.00337
%RSD	.36458	.21588	.04388	.17249	.25191	.17133	1.6513	.12513	.31691	.40265	.70095	.69727
#1	.50809	.54230	.96221	.48617	.46760	.47175	.00487	4.8600	.49252	.51393	.42941	.48603
#2	.50547	.54065	.96162	.48499	.46927	.47289	.00498	4.8686	.49032	.51687	.43369	.48126

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass					
											-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.4108	48.807	.97104	20.269	.52577	.49690	5.0655	.51662	.99177	.98563	-.01987	.94311
Stddev	.0052	.052	.00094	.016	.00027	.00126	.0198	.00371	.00086	.00828	.00020	.01082
%RSD	.21687	.10555	.09713	.08133	.05230	.25432	.39021	.71900	.08623	.84052	1.0224	1.1477
#1	2.4071	48.771	.97037	20.257	.52596	.49601	5.0515	.51399	.99116	.97977	-.02001	.93545
#2	2.4145	48.844	.97171	20.280	.52557	.49780	5.0794	.51925	.99237	.99148	-.01972	.95076

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.92812	5.0548	10.817	.99776	.47056	-.00576	.51366	.98812	-.00662	.52196	F .55361	.47814
Stddev	.01667	.0534	.114	.01056	.00099	.00212	.00151	.01182	.00599	.00073	.01006	.00137
%RSD	1.7964	1.0573	1.0573	1.0585	.21123	36.774	.29415	1.1965	90.419	.13903	1.8166	.28569
#1	.91633	5.0170	10.736	.99029	.46986	-.00725	.51259	.97976	-.00239	.52145	.54650	.47911
#2	.93990	5.0926	10.898	1.0052	.47126	-.00426	.51472	.99648	-.01086	.52248	.56072	.47718

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass				
											10.490%	

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2901.9	47122.	5843.3
Stddev	9.4	49.	36.2
%RSD	.32498	.10407	.61908
#1	2895.2	47087.	5868.8
#2	2908.5	47157.	5817.7

Sample Name: CCB Acquired: 6/1/2015 16:03:16 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2599 ppm
Avg	.00045	-.00051	-.00053	.00476	.00039	-.00003	.00203	.00193	-.00015	-.00018	.00046	.00061	.00047
Stddev	.00006	.00050	.00177	.00041	.00013	.00002	.00129	.00521	.00020	.00022	.00028	.00077	.00075
%RSD	14.382	98.658	336.72	8.5393	34.191	55.175	63.236	270.42	131.49	122.26	60.511	126.67	159.27

#1	.00049	-.00015	-.00178	.00447	.00048	-.00004	.00294	-.00176	-.00001	-.00034	.00066	.00006	-.00006
#2	.00040	-.00087	.00073	.00504	.00029	-.00002	.00112	.00561	-.00030	-.00002	.00026	.00116	.00100

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	.22305	-.00003	.00402	.00012	-.00003	.09040	-.00009	-.00818	-.00083	-.02143	-.00265	-.00456	.01595
Stddev	.00877	.00063	.00341	.00004	.00040	.01272	.00053	.00003	.00054	.00413	.00366	.00480	.00685
%RSD	3.9330	1914.7	84.875	35.869	1195.2	14.069	600.02	.40860	65.554	19.250	138.24	105.28	42.933
#1	.22925	.00041	.00161	.00016	-.00032	.08141	.00029	-.00815	-.00044	-.01851	-.00006	-.00116	.02079
#2	.21685	-.00048	.00643	.00009	.00025	.09939	-.00046	-.00820	-.00121	-.02435	-.00524	-.00795	.01111

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.03413	-.00159	.00019	-.00055	-.00058	.00207	-.03194	-.00050	-.00061	-.00592			
Stddev	.01465	.00174	.00010	.00009	.00012	.00030	.02395	.00011	.00025	.00116			
%RSD	42.933	109.73	51.269	15.836	20.703	14.596	74.981	22.483	40.353	19.553			
#1	.04450	-.00036	.00026	-.00049	-.00050	.00185	-.04888	-.00042	-.00079	-.00674			
#2	.02377	-.00282	.00012	-.00061	-.00067	.00228	-.01501	-.00058	-.00044	-.00511			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	2917.2	47753.	5626.0										
Stddev	4.3	74.	7.7										
%RSD	.14853	.15561	.13610										
#1	2914.2	47805.	5631.4										
#2	2920.3	47700.	5620.6										

Sample Name: CCVL3301032 Acquired: 6/1/2015 16:05:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01068	.11233	.01299	.10139	.01042	.00098	.10176	.21572	.00478	.01119	.00923	.01578
Stddev	.00061	.00058	.00220	.00086	.00042	.00009	.00080	.00247	.00001	.00038	.00018	.00043
%RSD	5.6654	.51491	16.952	.85214	4.0483	9.6867	.78738	1.1452	.14632	3.3795	1.9366	2.7238

#1	.01111	.11274	.01455	.10078	.01072	.00091	.10233	.21397	.00477	.01146	.00935	.01608
#2	.01025	.11192	.01144	.10200	.01012	.00104	.10119	.21746	.00478	.01093	.00910	.01548

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10341	3.4162	.00912	.21652	.01131	.01967	1.1824	.04319	2.9410	.00860	-.02594	F .00542
Stddev	.00212	.0663	.00065	.01009	.00021	.00003	.0256	.00059	.0060	.00124	.00261	.00118
%RSD	2.0516	1.9408	7.1739	4.6586	1.8665	.13732	2.1683	1.3767	.20453	14.402	10.048	21.811

#1	.10491	3.4631	.00959	.20939	.01116	.01965	1.2005	.04277	2.9452	.00773	-.02410	.00626
#2	.10191	3.3693	.00866	.22366	.01146	.01969	1.1642	.04361	2.9367	.00948	-.02779	.00459

Check ? Value Range	Chk Pass	None	Chk Fail .01000 -30.000%									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00875	.54364	1.1634	.10212	.01030	.01434	.00931	.01899	F .03154	.01032	.02547	F .00911
Stddev	.00381	.01203	.0257	.00124	.00035	.00239	.00025	.00119	.04342	.00098	.00005	.00041

#1	.01144	.55215	1.1816	.10124	.01055	.01603	.00913	.01984	.00084	.01101	.02550	.00882
#2	.00605	.53514	1.1452	.10299	.01005	.01266	.00948	.01815	.06224	.00962	.02543	.00940

Check ? Value Range	Chk Fail .01500 -30.000%	Chk Pass	Chk Fail .06000 -30.000%	Chk Pass	Chk Pass	Chk Fail .01500 -30.000%						
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2928.9	47804.	5681.2
Stddev	11.3	98.	18.2
%RSD	.38660	.20417	.32073

#1	2920.9	47735.	5668.4
#2	2936.9	47873.	5694.1

Sample Name: 280-69870-C-3-B Acquired: 6/1/2015 16:08:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	.09220	-.00740	.02322	.09289	-.00008	-.00190	107.12	.00003
Stddev	.00038	.00074	.00404	.00042	.00118	.00003	.00206	1.61	.00003
%RSD	34.764	.79921	54.678	1.7931	1.2738	41.247	108.41	1.5018	87.254
#1	.00134	.09272	-.00454	.02351	.09205	-.00005	-.00336	105.98	.00005
#2	.00081	.09168	-.01026	.02292	.09372	-.00010	-.00044	108.26	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00067	.00189	1.2509	1.2381	.00219	30.092	.11860	-.00267
Stddev	.00018	.00027	.00005	.0278	.0924	.00078	.024	.00045	.00009
%RSD	179.88	40.118	2.4840	2.2219	7.4624	35.504	.07841	.37983	3.4286
#1	-.00023	.00048	.00192	1.2313	1.1727	.00275	30.108	.11892	-.00273
#2	.00003	.00086	.00185	1.2706	1.3034	.00164	30.075	.11828	-.00260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.114	.00345	.07925	.00263	9.0475	.00093	-.00021	7.0465	15.080
Stddev	1.213	.00020	.00119	.00019	.1361	.00214	.00226	.2350	.503
%RSD	2.4699	5.8581	1.5038	7.0577	1.5042	229.26	1059.2	3.3348	3.3348
#1	48.256	.00359	.08009	.00276	9.1438	.00244	-.00181	6.8803	14.724
#2	49.971	.00331	.07840	.00250	8.9513	-.00058	.00138	7.2127	15.435
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00110	1.9202	.00018	.00134	-.00581	W -.05554	-.00096	-.00036	-.00535
Stddev	.00217	.0321	.00028	.00040	.00423	.01611	.00002	.00035	.00036
%RSD	197.64	1.6713	157.29	30.130	72.796	29.013	1.7594	96.118	6.6821
#1	-.00264	1.8975	-.00002	.00105	-.00880	-.04414	-.00098	-.00012	-.00560
#2	.00044	1.9429	.00037	.00162	-.00282	-.06693	-.00095	-.00061	-.00510
Check ?	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2825.9	46275.	5644.8						
Stddev	11.2	236.	38.1						
%RSD	.39700	.51050	.67566						
#1	2818.0	46108.	5671.8						
#2	2833.9	46442.	5617.8						

Sample Name: 280-69870-C-4-B Acquired: 6/1/2015 16:10:54 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.03552	-.00424	.13864	.64723	-.00004	.00051	2.6190	.00007
Stddev	.00062	.00043	.00729	.00082	.01596	.00014	.00016	.0335	.00012
%RSD	195.30	1.2100	171.85	.59047	2.4662	386.49	31.432	1.2783	166.23
#1	.00075	.03582	-.00940	.13922	.63595	.00006	.00062	2.5953	.00016
#2	-.00012	.03521	.00091	.13807	.65852	-.00014	.00040	2.6427	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00102	.00090	.00212	.65393	3.2506	.08612	.69815	.01052	.00005
Stddev	.00014	.00006	.00017	.00315	.0595	.00158	.01381	.00001	.00023
%RSD	13.260	6.4753	7.8339	.48229	1.8289	1.8323	1.9783	.10872	451.51
#1	-.00111	.00094	.00224	.65170	3.2086	.08724	.68839	.01052	-.00011
#2	-.00092	.00086	.00200	.65616	3.2927	.08501	.70792	.01051	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 592.56	.00012	.02554	-.00223	.00661	-.00262	W -.00659	8.5698	18.339
Stddev	16.11	.00043	.00001	.00079	.00475	.00183	.00072	.0815	.174
%RSD	2.7186	360.35	.03016	35.693	71.799	69.785	10.881	.95129	.95129
#1	581.17	-.00018	.02555	-.00279	.00325	-.00132	-.00608	8.5122	18.216
#2	603.95	.00042	.02554	-.00166	.00997	-.00391	-.00710	8.6275	18.463
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass				
High Limit	500.00						5.0000		
Low Limit	11.000						-.00500		
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00131	.48717	-.00230	-.00019	.00182	-.02023	-.00170	-.00097	-.00616
Stddev	.00012	.01252	.00141	.00021	.00087	.01864	.00076	.00005	.00100
%RSD	9.0484	2.5696	61.166	111.35	47.976	92.172	44.610	5.1053	16.219
#1	-.00123	.47832	-.00130	-.00004	.00244	-.03341	-.00223	-.00101	-.00545
#2	-.00140	.49602	-.00329	-.00034	.00120	-.00704	-.00116	-.00094	-.00687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2742.0	44876.	5679.8						
Stddev	9.9	105.	148.5						
%RSD	.36054	.23493	2.6145						
#1	2749.0	44802.	5784.8						
#2	2735.0	44951.	5574.8						

Sample Name: 280-69870-C-5-B Acquired: 6/1/2015 16:13:39 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00020	2.8759	-.00647	.14620	.49414	.00007	-.00006	3.6837	-.00013
#2	.00027	2.8600	-.00566	.14667	.49318	.00006	-.00091	3.6788	-.00015
Check ? High Limit Low Limit	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00041	.00268	.00435	1.9982	3.8853	.09154	1.1385	.05599	.00006
#2	-.00050	.00224	.00308	1.9820	3.9236	.09305	1.1318	.05596	.00049
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	564.49	.00198	.08448	-.00396	.18271	-.00263	-.00444	12.944	27.700
#2	563.96	.00126	.08851	-.00251	.17706	.00059	-.00464	13.043	27.911
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Pass	Chk Warn 10.000 -.00300	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00273	.48235	-.00104	.07132	.00184	.02287	.00398	.00949	-.00446
#2	-.00174	.48191	-.00030	.06990	.00029	.00056	.00489	.00898	-.00592
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2812.8	45449.	5645.8						
#2	2802.7	45305.	5664.9						

Sample Name: 280-69870-C-6-B Acquired: 6/1/2015 16:16:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm -.00080	As1890 ppm .00124	B_2089 ppm -.00062	Ba4554 ppm .00035	Be3130 ppm .00062	Bi2230 ppm .00718	Ca3179 ppm .00481	Cd2288 ppm -.00029
#1	-.00065	-.00126	.00042	-.00066	.00010	.00063	.00660	.00276	-.00036
#2	-.00094	-.00122	.00179	-.00058	.00060	.00062	.00775	.00687	-.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00042	Cu3247 ppm .00033	Fe2599 ppm -.00307	K_7664 ppm .00004	Li6707 ppm .27116	Mg2790 ppm .00536	Mn2576 ppm .00024	Mo2020 ppm -.00028
#1	.00037	.00020	-.00317	.00082	.25820	.00485	-.00062	.00003	-.00029
#2	.00047	.00046	-.00297	-.00074	.28411	.00586	.00111	-.00002	-.00027
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .21766	P_1782 ppm .00113	Pb2203 ppm -.00584	S_1820 ppm .00088	Sb2068 ppm -.00671	Se1960 ppm -.00270	Si2881 ppm W -.00983	SiO2 ppm .01008
#1	.22216	.00089	-.00633	.00049	-.00842	-.00245	-.00880	.02079	.04448
#2	.21316	.00137	-.00535	.00128	-.00500	-.00296	-.01087	-.00062	-.00133
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00141	Th2837 ppm .00010	Ti3349 ppm .00002	Tl1908 ppm -.00018	U_3701 ppm .00244	V_2924 ppm -.00940	Zn2062 ppm .00281	Zr3391 ppm -.00052
#1	-.00125	.00015	.00034	-.00021	.00302	-.02172	.00297	-.00051	-.00057
#2	-.00156	.00005	-.00029	-.00016	.00186	.00291	.00266	-.00053	-.00173
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 4959.0	Y_3774 Cts/S 81362.	360.073 {943}	377.433 {89}				
#1	4975.8	82440.	9682.2						
#2	4942.1	80284.	8221.6						

Sample Name: 280-69867-B-1-B Acquired: 6/1/2015 16:18:42 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00051	As1890 ppm .00148	B_2089 ppm .00036	Ba4554 ppm .00042	Be3130 ppm .00069	Bi2230 ppm .00667	Ca3179 ppm .00177	Cd2288 ppm .00038
#1	-.00023	-.00129	.00218	.00001	.00042	.00072	.00756	-.00265	-.00037
#2	-.00078	-.00166	.00015	-.00073	.00041	.00067	.00579	-.00089	-.00040
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00024	Cu3247 ppm .00027	Fe2599 ppm .00385	K_7664 ppm .00211	Li6707 ppm .25707	Mg2790 ppm .00646	Mn2576 ppm .00023	Mo2020 ppm .0004
#1	.00013	.00037	-.00367	-.00115	.26128	.00642	-.00089	.00007	-.00030
#2	.00035	.00017	-.00403	-.00308	.25286	.00651	.00135	.00001	-.00021
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm .05624	P_1782 ppm .00125	Pb2203 ppm .00592	S_1820 ppm .00002	Sb2068 ppm .00535	Se1960 ppm .00247	Si2881 ppm F -.01020	SiO2 ppm .01694
#1	.05019	.00133	-.00561	.00069	-.00278	-.00269	-.01012	-.01724	-.03690
#2	.06228	.00117	-.00623	-.00072	-.00793	-.00225	-.01028	-.01664	-.03562
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.01000	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00128	Th2837 ppm .00004	Ti3349 ppm .00135	Tl1908 ppm .00030	U_3701 ppm .00304	V_2924 ppm .00979	Zn2062 ppm .00342	Zr3391 ppm .00078
#1	-.00153	.00001	-.00186	-.00034	.00208	.00014	.00345	-.00100	-.00382
#2	-.00104	.00007	-.00084	-.00026	.00399	-.01971	.00339	-.00056	-.00154
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 5077.9	Y_3774 Cts/S 86136.	377.433 {89}					
#1	5090.7	86227.	8617.7						
#2	5065.2	86045.	8620.8						

Sample Name: 280-69867-B-2-B Acquired: 6/1/2015 16:21:04 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00009	4.9500	-.00410	.01443	.09464	.00012	.00015	32.168	.00025
#2	.00075	4.9863	-.00233	.01256	.09459	.00010	-.00331	32.314	.00014
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00079	.00370	.00483	3.2563	2.4373	.01533	6.2097	.09296	-.00051
#2	.00083	.00355	.00511	3.2742	2.4808	.01309	6.3199	.09543	-.00054
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	7.5288	.00481	.08531	-.00075	8.0593	-.00027	-.00251	15.628	33.444
#2	7.5672	.00527	.08653	.00155	8.2665	-.00244	-.00221	15.957	34.147
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00031	.21381	.00248	.14318	-.00118	-.02041	.00953	.01138	-.00337
#2	.00068	.21397	-.00042	.13353	-.00352	-.02467	.00931	.01153	-.00407
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2864.5	47768.	5867.0						
#2	2842.5	47714.	5841.3						

Sample Name: 280-69907-B-1-B Acquired: 6/1/2015 16:23:40 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279562 200.7 (Al Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	.08060	-.00097	.00352	.04168	.00010	-.00071	34.973	.00376
Stddev	.00002	.00036	.00154	.00065	.00036	.00014	.00004	.318	.00023
%RSD	3.7102	.44902	157.79	18.428	.85503	129.70	5.6419	.91047	6.0043
#1	.00055	.08034	-.00206	.00398	.04193	.00020	-.00068	35.198	.00392
#2	.00052	.08085	.00011	.00306	.04143	.00001	-.00074	34.747	.00360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00120	.00003	.01420	.34384	.98276	.00417	31.098	.12065	.00240
Stddev	.00051	.00003	.00014	.00486	.00333	.00072	.079	.00043	.00062
%RSD	42.246	88.854	.97358	1.4133	.33890	17.364	.25300	.35485	25.703
#1	.00156	.00001	.01429	.34728	.98512	.00468	31.154	.12096	.00283
#2	.00084	.00005	.01410	.34040	.98041	.00366	31.043	.12035	.00196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.92850	.00563	-.00025	.00341	30.319	.00028	W -.00525	2.5899	5.5424
Stddev	.00191	.00001	.00092	.00049	.229	.00060	.00131	.0093	.0199
%RSD	.20608	.09297	369.42	14.419	.75691	217.53	25.030	.36001	.36001
#1	.92986	.00564	-.00089	.00376	30.481	.00070	-.00618	2.5965	5.5565
#2	.92715	.00563	.00040	.00306	30.156	-.00015	-.00432	2.5833	5.5283
Check ?	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass					
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00077	.20837	-.00020	-.00029	-.00299	-.01185	-.00104	1.1408	-.00745
Stddev	.00123	.00115	.00125	.00048	.00000	.02198	.00119	.0219	.00247
%RSD	159.49	.55146	622.54	162.92	.14119	185.48	115.11	1.9205	33.087
#1	-.00164	.20918	-.00108	.00004	-.00299	-.02740	-.00019	1.1253	-.00920
#2	.00010	.20756	.00068	-.00063	-.00299	.00369	-.00188	1.1563	-.00571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2811.9	46226.	5777.2						
Stddev	2.8	95.	84.3						
%RSD	.09866	.20444	1.4597						
#1	2813.9	46159.	5717.5						
#2	2810.0	46293.	5836.8						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 16:26:17 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00440	51.549	.00036	.00158	.00126	.00009	.97980	.03773	-.00042	-.00047	.00078
Stddev	.00011	1.514	.00695	.00128	.00010	.00009	.00106	.00585	.00027	.00029	.00007
%RSD	2.4649	2.9362	1946.7	81.310	7.9905	92.743	.10792	15.510	63.558	61.472	8.4788
#1	.00433	52.620	.00527	.00249	.00133	.00003	.97905	.04186	-.00061	-.00026	.00073
#2	.00448	50.479	-.00456	.00067	.00118	.00016	.98055	.03359	-.00023	-.00067	.00082
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00168	49.800	.42594	.00497	.06081	-.00162	-.00055	249.75	.00307	-.00186	-.00191
Stddev	.00094	1.034	.00405	.00030	.00715	.00002	.00016	7.25	.00017	.00321	.00100
%RSD	55.878	2.0768	.95152	6.0215	11.757	1.2721	29.189	2.9047	5.6249	172.51	52.442
#1	-.00101	50.531	.42308	.00518	.05576	-.00161	-.00067	254.88	.00294	-.00413	-.00120
#2	-.00234	49.068	.42881	.00476	.06587	-.00164	-.00044	244.62	.00319	.00041	-.00262
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	4.7665	-.01251	.00470	.00602	.01289	-.00296	.00048	5.1814	-.01241	.00590	W 10.522
Stddev	.0632	.00174	.00135	.02192	.04690	.00202	.00014	.0219	.00025	.00030	.062
%RSD	1.3258	13.926	28.666	363.77	363.77	68.088	29.520	.42201	2.0191	5.1650	.58457
#1	4.8112	-.01374	.00565	.02152	.04606	-.00154	.00038	5.1659	-.01259	.00568	10.566
#2	4.7218	-.01128	.00375	-.00947	-.02027	-.00439	.00058	5.1968	-.01223	.00611	10.479
Check ? Value Range	Chk Pass	None	None	None	None	None	Chk Pass	None	None	Chk Warn	
										10.000	
										5.0000%	
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00251	-.00107	-.15262								
Stddev	.00100	.00080	.00053								
%RSD	39.962	74.581	.34966								
#1	.00322	-.00163	-.15224								
#2	.00180	-.00050	-.15300								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2823.8	46046.	5622.4								
Stddev	6.8	199.	191.7								
%RSD	.24219	.43214	3.4089								
#1	2828.7	46186.	5486.8								
#2	2819.0	45905.	5757.9								

Sample Name: CCV-3296664 Acquired: 6/1/2015 16:28:53 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.52272	F .56195	.98823	.49602	.47920	.48330	.00323	4.9665	.50687	.52503	F .43543	.48969
Stddev	.00112	.00124	.01331	.00305	.00153	.00037	.00023	.0138	.00051	.00556	.00587	.00306
%RSD	.21445	.22076	1.3464	.61553	.31852	.07719	7.1935	.27741	.10141	1.0585	1.3478	.62575
#1	.52351	.56108	.97882	.49386	.47812	.48303	.00307	4.9567	.50723	.52110	.43128	.49186
#2	.52193	.56283	.99764	.49818	.48028	.48356	.00340	4.9762	.50650	.52896	.43958	.48752

Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 -10.490%	Chk Pass
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.4765	49.843	.98562	20.761	.54297	.50702	5.1590	.52635	1.0181	1.0013	-.02080	.96226
Stddev	.0020	.141	.00572	.054	.00081	.00659	.0028	.00748	.0130	.0127	.00017	.01610
%RSD	.07906	.28323	.58034	.26010	.14978	1.3001	.05391	1.4214	1.2740	1.2690	.82229	1.6734
#1	2.4751	49.942	.98158	20.799	.54240	.50236	5.1610	.52106	1.0089	.99231	-.02068	.95087
#2	2.4779	49.743	.98967	20.723	.54355	.51168	5.1570	.53164	1.0273	1.0103	-.02092	.97364

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.94610	5.1245	10.966	1.0204	.48246	-.00384	.52873	.99571	-.01260	.54022	F .57111	.48640
Stddev	.01808	.0526	.113	.0178	.00118	.00225	.00239	.01593	.05459	.00382	.00391	.00264
%RSD	1.9114	1.0266	1.0266	1.7405	.24518	58.411	.45280	1.6002	433.30	.70674	.68532	.54192
#1	.93331	5.0873	10.887	1.0079	.48163	-.00543	.52704	.98445	.02600	.53753	.56834	.48453
#2	.95889	5.1617	11.046	1.0330	.48330	-.00226	.53043	1.0070	-.05120	.54292	.57387	.48826

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 10.490%	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2856.9	46628.	5781.0									
Stddev	2.3	227.	10.7									
%RSD	.08006	.48595	.18516									
#1	2858.6	46789.	5788.6									
#2	2855.3	46468.	5773.4									

Sample Name: CCB Acquired: 6/1/2015 16:31:23 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0003	-0.00012	-0.00351	.00184	.00027	.00005	.00027	.00365	-0.00040	-0.00010	.00013
Stddev	.00041	.00079	.00360	.00063	.00008	.00007	.00318	.00286	.00013	.00011	.00002
%RSD	1225.9	649.19	102.54	34.071	28.785	155.44	1195.7	78.226	31.715	106.29	12.053
#1	.00025	.00044	-0.00097	.00229	.00033	.00010	-0.00198	.00163	-0.00049	-0.00003	.00014
#2	-.00032	-.00068	-.00605	.00140	.00022	.00000	.00251	.00567	-.00031	-.00018	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	-.00012	.32171	.00031	.00484	.00021	-.00021	.10004	-.00013	-.00602	-.00137
Stddev	.00038	.00277	.00447	.00052	.00271	.00013	.00007	.01403	.00010	.00276	.00114
%RSD	58.799	2358.5	1.3897	164.22	56.011	64.191	31.275	14.021	81.318	45.902	82.874
#1	.00092	.00184	.31855	.00068	.00292	.00030	-.00017	.10996	-.00020	-.00407	-.00057
#2	.00038	-.00207	.32487	-.00005	.00676	.00011	-.00026	.09013	-.00005	-.00798	-.00217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02663	-.00134	F -.00803	.01369	.02930	-.00118	.00002	.00222	-.00027	.00215	-.01707
Stddev	.00432	.00322	.00066	.02209	.04726	.00056	.00005	.00132	.00012	.00124	.02175
%RSD	16.207	240.55	8.2376	161.32	161.32	47.866	315.59	59.650	44.856	57.458	127.41
#1	-.02358	.00094	-0.00756	-.00193	-.00412	-.00158	-.00002	.00315	-.00018	.00303	-0.03245
#2	-.02968	-.00361	-.00850	.02931	.06272	-.00078	.00005	.00128	-.00035	.00128	-.00169
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00033	-.00001	-.00659								
Stddev	.00067	.00036	.00121								
%RSD	200.51	3298.9	18.360								
#1	-.00080	-.00026	-.00574								
#2	.00014	.00024	-.00745								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2906.7	47502.	5679.9								
Stddev	3.4	52.	92.7								
%RSD	.11580	.10957	1.6321								
#1	2909.1	47539.	5745.5								
#2	2904.3	47465.	5614.4								

Sample Name: CCVL3301032 Acquired: 6/1/2015 16:33:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01109	.11758	.01454	.10074	.01049	.00101	.10438	.21703	.00483	.01100	.00921	.01546
Stddev	.00033	.00012	.00292	.00132	.00024	.00008	.00432	.00365	.00014	.00039	.00006	.00018
%RSD	2.9964	.10348	20.106	1.3084	2.3044	8.2488	4.1395	1.6818	2.9260	3.5555	.70137	1.1809
#1	.01085	.11766	.01660	.10168	.01031	.00107	.10743	.21444	.00493	.01127	.00916	.01533
#2	.01132	.11749	.01247	.09981	.01066	.00095	.10132	.21961	.00473	.01072	.00925	.01559

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10604	3.4812	F.01310	.22399	.01170	.01967	1.1882	.04358	2.9666	.00887	-.01624	F.00577
Stddev	.00451	.0435	.00037	.00186	.00015	.00003	.0252	.00023	.0067	.00031	.00888	.00171
%RSD	4.2555	1.2504	2.8329	.83208	1.2578	.13422	2.1221	.51992	.22770	3.4452	54.690	29.700
#1	.10285	3.4504	.01284	.22531	.01180	.01965	1.1704	.04374	2.9713	.00865	-.02252	.00698
#2	.10923	3.5119	.01337	.22267	.01160	.01969	1.2061	.04342	2.9618	.00908	-.00996	.00456

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Fail .01000						
			30.000%									-30.000%

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00739	.52843	1.1308	.09934	.01043	.01748	.01011	.01853	F.07818	.01132	.02518	F.00897
Stddev	.00009	.01762	.0377	.00235	.00025	.00063	.00053	.00142	.01693	.00099	.00025	.00324
%RSD	1.1819	3.3344	3.3344	2.3625	2.4276	3.6093	5.2455	7.6580	21.657	8.7119	1.0100	36.191
#1	.00745	.51597	1.1042	.10100	.01026	.01703	.01048	.01753	.09015	.01202	.02536	.00667
#2	.00732	.54089	1.1575	.09768	.01061	.01793	.00973	.01954	.06621	.01062	.02500	.01126

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Fail .01500						
									30.000%			-30.000%

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2863.9	47093.	5704.1
Stddev	8.7	122.	192.7
%RSD	.30430	.25913	3.3781
#1	2857.8	47007.	5840.4
#2	2870.1	47179.	5567.9

Sample Name: MB 280-279561/1-A Acquired: 6/1/2015 16:36:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 6/1 Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.00344	-.00175	.00172	.00089	-.00010	-.00024	.03562	-.00012
Stddev	.00000	.00024	.00102	.00032	.00033	.00011	.00128	.00398	.00026
%RSD	.75379	6.9098	58.267	18.373	37.602	109.85	532.44	11.175	227.24
#1	.00046	.00361	-.00103	.00149	.00112	-.00002	-.00115	.03844	.00007
#2	.00047	.00327	-.00247	.00194	.00065	-.00018	.00066	.03281	-.00030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	-.00007	.00128	.00738	.24849	.00273	.00570	.00053	-.00025
Stddev	.00022	.00005	.00016	.00118	.00102	.00090	.01000	.00006	.00034
%RSD	128.87	75.846	12.651	15.965	.40934	32.979	175.39	11.109	139.71
#1	.00001	-.00003	.00139	.00821	.24777	.00209	-.00137	.00058	.00000
#2	.00032	-.00010	.00116	.00655	.24921	.00336	.01278	.00049	-.00049
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem Line	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26696	-.00033	-.00849	.00126	.01360	-.00346	-.00517	.03305	.07073
Stddev	.01715	.00064	.00265	.00140	.00363	.00327	.00048	.00349	.00746
%RSD	6.4225	193.38	31.228	111.32	26.659	94.417	9.1815	10.547	10.547
#1	.27908	-.00079	-.01036	.00225	.01104	-.00578	-.00484	.03552	.07601
#2	.25484	.00012	-.00661	.00027	.01616	-.00115	-.00551	.03059	.06546
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00185	.00023	-.00045	-.00072	.00184	-.02180	-.00071	.00681	-.00439
Stddev	.00079	.00008	.00015	.00019	.00025	.03929	.00016	.00073	.00238
%RSD	42.749	34.215	33.101	26.747	13.508	180.21	23.032	10.785	54.202
#1	-.00241	.00029	-.00034	-.00058	.00202	.00598	-.00060	.00629	-.00271
#2	-.00129	.00018	-.00055	-.00085	.00167	-.04959	-.00083	.00733	-.00607
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std. Line	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2850.1	46530.	5656.3						
Stddev	3.3	113.	46.9						
%RSD	.11620	.24321	.82842						
#1	2852.4	46610.	5623.2						
#2	2847.7	46450.	5689.4						

Sample Name: LCS 280-279561/2-A Acquired: 6/1/2015 16:38:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .05217	As1890 ppm 2.1094	B_2089 ppm .97464	Ba4554 ppm 1.9165	Be3130 ppm .04819	Bi2230 ppm 1.8868	Ca3179 ppm 48.353	Cd2288 ppm .09989
#1	.05246	2.1100	.97765	.97758	1.9379	.04859	1.8812	48.904	.09972
#2	.05188	2.1088	.97163	.98240	1.8951	.04780	1.8925	47.802	.10006
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .50395	Cu3247 ppm F .16744	Fe2599 ppm .24736	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	.50365	.16772	.24691	.99948	51.056	1.0053	50.781	.53339	1.0439
#2	.50426	.16715	.24781	.97940	49.852	.98315	50.945	.53528	1.0428
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 51.905	P_1782 ppm .50380	Pb2203 ppm 10.264	S_1820 ppm .49007	Sb2068 ppm 1.8821	Se1960 ppm .48773	Si2881 ppm 1.8845	SiO2 ppm 10.214
#1	51.605	.50339	10.245	.49114	1.8697	.48749	1.8734	10.212	21.854
#2	52.206	.50420	10.283	.48900	1.8946	.48796	1.8956	10.216	21.863
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm 2.0056	Th2837 ppm .96501	Ti3349 ppm 1.0407	Tl1908 ppm 1.0429	U_3701 ppm 1.9147	V_2924 ppm 2.0924	Zn2062 ppm .53599	Zr3391 ppm F .55738
#1	2.0053	.97551	1.0385	1.0412	1.9105	2.1010	.53505	.55774	.45167
#2	2.0060	.95450	1.0428	1.0446	1.9190	2.0837	.53694	.55702	.45185
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .55500 .42500	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2803.5	Y_3774 Cts/S 46148.	377.433 {89}					
#1	2804.3	46245.	5607.4						
#2	2802.7	46050.	5757.6						

Sample Name: 280-69895-L-2-B Acquired: 6/1/2015 16:41:10 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00006	.16420	.00240	.24063	.17330	.00007	-.00224	127.62	.00017
#2	.00067	.16557	-.00405	.24433	.17362	-.00007	-.00053	127.49	.00022
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00447	.00351	.00478	2.8279	14.633	.03577	31.039	.60140	.00424
#2	.00366	.00372	.00459	2.8254	14.670	.03633	30.745	.60257	.00429
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	108.54	.01709	.78420	.00573	55.257	.00462	-.00021	3.9316	8.4137
#2	108.78	.01703	.77786	.00770	55.423	.00264	.00476	3.9190	8.3866
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00144	1.4562	.00180	.00318	-.01154	-.02608	.00154	.08048	-.00461
#2	.00213	1.4611	-.00237	.00445	-.00915	.01509	.00267	.08340	-.00508
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2770.2	46043.	5680.0						
#2	2762.9	45951.	5720.3						

Sample Name: 280-69895-L-2-B SD@5 Acquired: 6/1/2015 16:43:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00019	As1890 ppm .03411	B_2089 ppm .00077	Ba4554 ppm .04829	Be3130 ppm .03298	Bi2230 ppm .00006	Ca3179 ppm .00066	Cd2288 ppm .23.633	
#1	-.00027	.03385	-.00168	.04787	.03307	-.00004	-.00002	23.854	-.00038	
#2	-.00012	.03436	.00013	.04872	.03289	-.00008	.00135	23.411	-.00025	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00106	Cu3247 ppm .00107	Fe2599 ppm .00126	K_7664 ppm .52990	Li6707 ppm 2.9009	Mg2790 ppm .01003	Mn2576 ppm 6.0307	Mo2020 ppm .11755	
#1	.00133	.00113	.00137	.52673	2.9366	.01020	5.9598	.11644	.00033	
#2	.00079	.00100	.00114	.53307	2.8651	.00985	6.1016	.11866	-.00048	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 18.693	P_1782 ppm .00488	Pb2203 ppm .13890	S_1820 ppm .00153	Sb2068 ppm 10.717	Se1960 ppm -.00106	Si2881 ppm -.00328	SiO2 ppm .73497	
#1	18.746	.00458	.13704	-.00011	10.563	-.00150	-.00638	.73089	1.5641	
#2	18.639	.00518	.14076	.00317	10.871	-.00062	-.00018	.73906	1.5816	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00422	Th2837 ppm .26771	Ti3349 ppm .00021	Tl1908 ppm -.00001	U_3701 ppm -.00118	V_2924 ppm -.02299	Zn2062 ppm -.00030	Zr3391 ppm .01613	
#1	.00390	.27048	.00074	.00032	-.00092	-.02387	-.00026	.01599	-.00672	
#2	.00453	.26493	-.00032	-.00035	-.00143	-.02210	-.00033	.01627	-.00647	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2845.0	Y_3774 Cts/S 46613.	377.433 {89}						
#1	2840.5	46593.	5589.6							
#2	2849.6	46634.	5743.7							

Sample Name: 280-69895-L-2-C MS Acquired: 6/1/2015 16:46:26 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.2559	Al3092 ppm W 2.6169	As1890 ppm .99896	B_2089 ppm 1.2375	Ba4554 ppm 2.0964	Be3130 ppm .04837	Bi2230 ppm F 1.8772	Ca3179 ppm 178.57
#1	.05257	2.2602	2.6164	.99364	1.2393	2.0976	.04846	1.8758	178.53
#2	.05333	2.2516	2.6174	1.0043	1.2356	2.0952	.04829	1.8785	178.62
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
Elem Line Units Avg Stddev %RSD	Cd2288 228.802 {447}	Co2286 ppm .50023	Cr2055 ppm W .16620	Cu3247 ppm .25227	Fe2599 ppm 3.8548	K_7664 ppm 65.914	Li6707 ppm 1.0398	Mg2790 ppm 82.029	Mn2576 ppm 1.1456
#1	.10105	.50039	.16616	.25130	3.8574	65.955	1.0396	81.895	1.1440
#2	.09982	.50007	.16625	.25324	3.8521	65.872	1.0400	82.163	1.1473
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Mo2020 202.030 {467}	Na8183 ppm 1.0506	Ni2316 ppm 162.05	P_1782 ppm .50874	Pb2203 ppm W 11.364	S_1820 ppm .47891	Sb2068 ppm 59.211	Se1960 ppm .49778	Si2881 ppm 1.9190
#1	1.0510	162.12	.50884	11.395	.48049	59.350	.49850	1.9186	14.382
#2	1.0503	161.97	.50864	11.332	.47733	59.071	.49705	1.9193	14.421
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	SiO2 288.158 {117}2	Sn1899 ppm 30.819	Sr4077 ppm W 2.0103	Th2837 ppm 2.4722	Ti3349 ppm 1.0317	Tl1908 ppm 1.0531	U_3701 ppm 1.8657	V_2924 ppm 2.0676	Zn2062 ppm .54082
#1	30.777	2.0152	2.4736	1.0315	1.0526	1.8692	2.0866	.53962	.62597
#2	30.861	2.0055	2.4709	1.0319	1.0536	1.8621	2.0486	.54202	.62419
Check ? High Limit Low Limit	Chk Pass	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Zr3391 339.198 { 99}								
#1	.45244								
#2	.45206								
Check ? High Limit Low Limit	Chk Pass								

Sample Name: 280-69895-L-2-C MS Acquired: 6/1/2015 16:46:26 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279561 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2749.1	45242.	5703.1
Stddev	4.5	46.	26.1
%RSD	.16510	.10231	.45773
#1	2745.9	45274.	5721.5
#2	2752.3	45209.	5684.6

Sample Name: 280-69895-L-2-D MSD Acquired: 6/1/2015 16:48:49 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05087	2.1929	W 2.5945	.97374	1.1969	2.0790	.04806	F 1.8355	174.05
Stddev	.00064	.0166	.0236	.00139	.0053	.0150	.00034	.0096	1.19
%RSD	1.2657	.75595	.90820	.14296	.44660	.72359	.71319	.52434	.68235
#1	.05133	2.2046	2.5778	.97473	1.2007	2.0896	.04830	1.8423	174.89
#2	.05042	2.1812	2.6112	.97276	1.1931	2.0684	.04782	1.8287	173.21
Check ?	Chk Pass	Chk Pass	Chk Warn 500.00 3.2000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09777	.48823	W .16617	.24278	3.7404	65.120	1.0285	78.288	1.0959
Stddev	.00019	.00314	.00033	.00116	.0160	.328	.0044	.446	.0100
%RSD	.19122	.64268	.19778	.47822	.42903	.50408	.42728	.57026	.90978
#1	.09791	.49045	.16640	.24360	3.7517	65.352	1.0316	78.604	1.1030
#2	.09764	.48602	.16594	.24196	3.7290	64.888	1.0254	77.973	1.0889
Check ?	Chk Pass	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0206	158.35	.49507	W 11.068	.46555	56.605	.48059	1.8715	14.077
Stddev	.0042	1.11	.00494	.084	.00424	.340	.00161	.0062	.052
%RSD	.40886	.70211	.99741	.76003	.91041	.60008	.33468	.32974	.36654
#1	1.0235	159.13	.49856	11.128	.46854	56.846	.48173	1.8758	14.041
#2	1.0176	157.56	.49158	11.009	.46255	56.365	.47945	1.8671	14.114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	30.125	1.9510	2.4204	.99869	1.0144	1.8192	1.9984	.52355	.60075
Stddev	.110	.0096	.0168	.01160	.0086	.0103	.0274	.00283	.00761
%RSD	.36654	.49086	.69374	1.1611	.85195	.56503	1.3695	.54091	1.2661
#1	30.047	1.9578	2.4322	1.0069	1.0205	1.8265	1.9791	.52555	.60613
#2	30.203	1.9443	2.4085	.99049	1.0082	1.8120	2.0178	.52154	.59537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.44615								
Stddev	.00152								
%RSD	.34009								
#1	.44723								
#2	.44508								
Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-69895-L-2-D MSD Acquired: 6/1/2015 16:48:49 Type: Unk
Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 279561 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2811.4	46718.	5757.3
Stddev	15.0	370.	2.3
%RSD	.53507	.79302	.03934
#1	2800.8	46456.	5758.9
#2	2822.0	46979.	5755.7

Sample Name: 280-69850-F-1-A Acquired: 6/1/2015 16:51:11 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm	As1890 k .1532	B_2089 189.042 {478}	Ba4554 455.403 { 74}	Be3130 k .00670	Bi2230 k .03995	Ca3179 F 1952.9	Cd2288 k .00452
#1	.01092	161.36	.19178	4.6271	8.1860	.00645	-.01232	1961.6	.00340
#2	k .01971	k 161.99	k .18561	4.6201	8.0316	k .00695	k .09223	1944.2	k .00564
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1000.0 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm	Cu3247 W .30521	Fe2714 205.560 {464}	K_7664 766.490 { 44}	Li6707 670.784 { 50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.29415	.40677	.59067	582.50	255.99	.14167	202.93	72.566	.04006
#2	k .31627	.40613	k .59362	k 582.82	256.67	.14493	k 203.57	^ -----	k .03852
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000	Chk Pass	Chk Warn 500.00	Chk Warn 100.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Warn -.01000	Chk Pass	Chk Warn 40.000	Chk Warn -.50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 { 41}	Ni2316 ppm	P_1782 W 724.54	Pb2203 231.604 {446}	S_1820 178.284 {489}	Sb2068 220.353 {453}	Se1960 182.034 {485}	Si2881 206.090 {472}	SiO2 288.158 {117}288.158 {117}2
#1	723.91	.25216	31.931	.38953	72.993	.00575	.03571	43.088	92.209
#2	725.17	k .25633	31.957	k .41921	k 73.040	k .03154	k .05732	k 43.024	k 92.071
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Warn 2.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Warn 11.000	Chk Pass	Chk Warn -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm	Th2837 W 10.592	Ti3349 k .23761	Tl1908 kW 11.197	U_3701 kF -.03292	V_2924 kF -.34349	Zn2062 k .76064	Zr3391 3.5007
#1	.07145	10.523	.05526	11.189	-.02605	-.32688	.76360	3.4929	.03834
#2	k .05307	10.660	k .41997	k 11.206	k -.03979	k -.36009	k .75769	3.5086	k .03158
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000	Chk Pass	Chk Warn 10.000	Chk Fail 20.000	Chk Fail 50.000	Chk Pass	Chk Pass	Chk Pass
Check ? High Limit Low Limit	Chk Pass	Chk Warn -.01000	Chk Pass	Chk Warn -.01000	Chk Fail -.02000	Chk Fail -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 { 94}	Y_3774 Cts/S	377.433 { 89}				Zn2062 3.5007	Zr3391 k .03496
#1	3278.5	54281.	7381.4					.0111	.00478
#2	3280.5	53910.	7407.0					.31661	13.679

Sample Name: 280-69850-F-2-A Acquired: 6/1/2015 16:55:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00261	As1890 ppm 44.691	B_2089 ppm .31118	Ba4554 ppm W 13.167	Be3130 ppm .15519	Bi2230 ppm .00112	Ca3179 ppm -.00310	Cd2288 ppm 463.75	
#1	.00195	45.022	.30330	13.164	1.5591	.00112	-.00376	462.26	.00038	
#2	.00328	44.360	.31905	13.170	1.5447	.00113	-.00244	465.24	-.00022	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .08163	Cu3247 ppm W .29578	Fe2714 ppm .14640	K_7664 ppm 766.490 {44}	Li6707 ppm F 614.97	Mg2790 ppm .13088	Mn2576 ppm 144.20	Mo2020 ppm W 19.482	
#1	.08159	.29399	.14568	143.38	618.65	.13077	144.22	19.518	.02098	
#2	.08166	.29756	.14713	141.84	611.29	.13098	144.17	19.446	.01969	
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1911.9	P_1782 ppm .16776	Pb2203 ppm W 11.970	S_1820 ppm 182.034 {485}	Sb2068 ppm 206.833 {463}	Se1960 ppm 196.090 {472}	Si2881 ppm 288.158 {117}	SiO2 ppm 288.158 {117}2	
#1	1923.7	.16914	12.045	.09068	60.512	.03942	.01616	66.714	142.77	
#2	1900.2	.16638	11.895	.08969	60.618	.04399	.02287	66.055	141.36	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .05362	Th2837 ppm 2.6304	Ti3349 ppm .01316	Tl1908 ppm W -.01643	U_3701 ppm 370.152 {91}	V_2924 ppm 292.402 {115}	Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}	
#1	.05377	2.6437	.01238	3.9984	-.01625	-.06541	.31366	.92875	.09143	
#2	.05346	2.6170	.01394	4.0075	-.01660	-.10935	.31585	.93125	.08740	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2628.8	Y_3774 Cts/S 11.2	377.433 {89} 5711.9				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}	
#1	2620.9	42723.	5685.4							
#2	2636.7	42702.	5738.5							

Sample Name: 280-69850-F-3-A Acquired: 6/1/2015 16:59:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 ppm .00055	As1890 ppm 40.761	B_2089 ppm .52566	W 21.074	Ba4554 ppm 1.1521	Be3130 ppm .00121	Bi2230 ppm -.00703	Ca3179 ppm 351.62	Cd2288 ppm -.00038
#1	.00035	41.402	.52942	21.041	1.1689	.00119	-.00860	357.64	-.00024	
#2	.00074	40.120	.52189	21.107	1.1354	.00122	-.00546	345.61	-.00051	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .07520	Cu3247 ppm W .43985	Fe2714 ppm .10903	K_7664 ppm 212.23	Li6707 ppm F 999.76	Mg2790 ppm 211.92	Mn2576 ppm 177.75	Mo2020 ppm W 10.210	ppm .02560
#1	.07438	.43485	.10882	215.06	1017.5	.21408	177.58	10.194	.02451	
#2	.07602	.44485	.10925	209.39	982.00	.20976	177.92	10.227	.02669	
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Fail 500.00 -2.0000	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 3124.8	P_1782 ppm .23430	Pb2203 ppm W 18.162	S_1820 ppm .08045	Sb2068 ppm 78.218	Se1960 ppm .05787	Si2881 ppm .02240	SiO2 ppm W 74.165	ppm .158.71
#1	3169.8	.23047	18.152	.07769	78.180	.05695	.02318	75.179	160.88	
#2	3079.7	.23812	18.171	.08321	78.257	.05880	.02162	73.151	156.54	
Check ? High Limit Low Limit	Chk Warn 500.00 11.000	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 50.000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .09099	Th2837 ppm 1.8599	Ti3349 ppm .02572	Tl1908 ppm 3.5712	U_3701 ppm W -.01507	V_2924 ppm F -.13865	Zn2062 ppm .39992	Zr3391 ppm 1.7059	.21062
#1	.08989	1.8865	.02514	3.5651	-.01451	-.12290	.39950	1.7017	.21239	
#2	.09210	1.8332	.02631	3.5772	-.01564	-.15440	.40035	1.7101	.20884	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2523.7	Y_3774 Cts/S 41312.	377.433 {89}	5579.3			Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}	
#1	2521.3	41444.	5513.7							
#2	2526.1	41181.	5644.9							

Sample Name: CCVH-3294468 Acquired: 6/1/2015 17:02:58 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm	Fe2714 ppm
Avg	.00333	51.472	.00321	.03506	.00143	.00003	.97689	.03943	-.00037	-.00049	.00082	-.00271	49.796
Stddev	.00021	1.466	.00598	.00174	.00014	.00011	.00636	.00136	.00001	.00025	.00004	.00029	1.209
%RSD	6.4163	2.8492	186.02	4.9665	9.7544	360.94	.65126	3.4571	1.8335	51.036	5.0903	10.877	2.4275
#1	.00318	52.509	.00744	.03629	.00153	-.00005	.98139	.04039	-.00037	-.00066	.00085	-.00250	50.651
#2	.00348	50.435	-.00101	.03383	.00134	.00011	.97239	.03846	-.00036	-.00031	.00079	-.00291	48.941
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Elem Units	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm
Avg	1.0860	.00501	.05614	-.00133	-.00079	251.49	.00322	-.00555	-.00023	4.7829	-.01295	.00379	.33784
Stddev	.0084	.00154	.00821	.00004	.00038	7.72	.00026	.00312	.00144	.0216	.00080	.00907	.03704
%RSD	.77228	30.656	14.624	3.0225	48.388	3.0706	8.0492	56.173	641.23	.45051	6.1673	239.62	10.964
#1	1.0801	.00609	.06194	-.00131	-.00052	256.95	.00304	-.00335	-.00125	4.7677	-.01351	.01020	.36403
#2	1.0919	.00392	.05033	-.00136	-.00107	246.03	.00341	-.00776	.00080	4.7982	-.01238	-.00263	.31165
Check ? Value Range	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Elem Units	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm			
Avg	.72298	-.00293	.00040	5.2190	-.01215	.00396	10.412	.00295	-.00207	-.15443			
Stddev	.07927	.00038	.00005	.0080	.00060	.00011	.001	.00017	.00004	.00132			
%RSD	10.964	12.885	13.361	.15263	4.9520	2.6868	.01020	5.8809	2.0177	.85306			
#1	.77903	-.00320	.00044	5.2246	-.01173	.00403	10.413	.00283	-.00204	-.15536			
#2	.66692	-.00267	.00036	5.2133	-.01258	.00388	10.411	.00308	-.00210	-.15350			
Check ? Value Range	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	None	None	None
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S										
Avg	2835.4	46225.	5661.6										
Stddev	1.5	48.	181.1										
%RSD	.05162	.10385	3.1984										
#1	2834.4	46191.	5533.5										
#2	2836.5	46259.	5789.6										

Sample Name: CCV-3296664 Acquired: 6/1/2015 17:05:34 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .52726	Al1670 ppm F .56871	As1890 ppm 1.0071	B_2089 ppm .52310	Ba4554 ppm .49310	Be3130 ppm .49589	Bi2230 ppm .00335	Ca3179 ppm 5.1527	Cd2288 ppm .50990	Co2286 ppm .53328	Cr2055 ppm F .43733
#1	.52571	.56883	1.0038	.52349	.49253	.49467	.00313	5.1553	.50918	.53203	.43699
#2	.52881	.56859	1.0104	.52271	.49366	.49711	.00358	5.1501	.51061	.53453	.43767
Check ? Value Range	Chk Pass .50000 10.490%	Chk Fail Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	None	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Fail .50000 -10.490%	
Elem Units Avg Stddev %RSD	Cu3247 ppm .49330	Fe2599 ppm 2.5465	K_7664 ppm 51.877	Li6707 ppm 1.0231	Mg2790 ppm 20.929	Mn2576 ppm W .55151	Mo2020 ppm .51471	Na5895 ppm F 5.7015	Ni2316 ppm .53368	P_1782 ppm 1.0290	Pb2203 ppm 1.0090
#1	.49220	2.5525	51.867	1.0196	20.917	.55096	.51387	5.7160	.53211	1.0222	1.0069
#2	.49440	2.5404	51.888	1.0265	20.941	.55206	.51555	5.6870	.53525	1.0357	1.0112
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .50000 10.000%	Chk Pass	Chk Fail 5.0000 10.490%	Chk Pass	Chk Pass	Chk Pass
Elem Units Avg Stddev %RSD	S_1820 ppm -.00968	Sb2068 ppm .96166	Se1960 ppm .94183	Si2881 ppm F 5.7196	SiO2 ppm 12.240	Sn1899 ppm F 1.0277	Sr4077 ppm .49684	Th2837 ppm -.00460	Ti3349 ppm .53944	TI1908 ppm .99870	U_3701 ppm -.02763
#1	-0.11172	96141	94454	5.7064	12.212	1.0277	49618	-.00343	53861	.99704	-.04724
#2	-.00763	.96191	.93912	5.7329	12.268	1.0277	.49749	-.00577	.54026	1.0004	-.00802
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Fail 5.0000 10.490%	Chk Fail 10.700 10.490%	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem Units Avg Stddev %RSD	V_2924 ppm W .55173	Zn2062 ppm F .58823	Zr3391 ppm .49286								
#1	.55029	.58480	.49368								
#2	.55317	.59166	.49203								
Check ? Value Range	Chk Warn .50000 10.000%	Chk Fail .50000 10.490%	Chk Pass								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2826.3	Y_3600 Cts/S 46091.	Y_3774 Cts/S 5557.9								
#1	2829.8	46137.	5550.9								
#2	2822.7	46045.	5564.9								

Sample Name: CCB Acquired: 6/1/2015 17:08:04 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	-.00044	-.00206	.01755	.00057	-.00011	.00449	.01954	-.00040	.00024	.00022
Stddev	.00034	.00011	.00242	.00042	.00050	.00000	.00131	.00232	.00006	.00017	.00014
%RSD	94.285	25.758	117.29	2.3759	87.559	2.6862	29.196	11.871	14.755	69.273	63.526
#1	.00061	-.00036	-.00377	.01785	.00022	-.00011	.00356	.01790	-.00036	.00036	.00012
#2	.00012	-.00052	-.00035	.01726	.00093	-.00010	.00542	.02118	-.00044	.00012	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00168	F .51288	.00137	.00904	.00028	-.00014	.34876	.00036	-.00689	-.00201
Stddev	.00003	.00118	.03063	.00054	.00071	.00004	.00028	.00832	.00008	.00070	.00028
%RSD	14.594	70.191	5.9715	39.789	7.7969	12.939	198.65	2.3868	22.331	10.144	13.968
#1	.00023	.00252	.49122	.00175	.00954	.00025	.00006	.35465	.00030	-.00640	-.00220
#2	.00019	.00085	.53454	.00098	.00855	.00030	-.00033	.34287	.00041	-.00739	-.00181
Check ?	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit			-.50000								
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01943	-.00027	F -.00557	.09840	.21059	-.00038	.00026	-.00150	-.00057	.00104	.01024
Stddev	.00030	.00083	.00060	.00202	.00431	.00040	.00005	.00105	.00079	.00084	.00233
%RSD	1.5217	308.52	10.789	2.0479	2.0479	104.91	20.210	69.584	137.78	80.760	22.762
#1	-.01964	-.00086	-.00599	.09698	.20754	-.00010	.00029	-.00224	-.00001	.00044	.01189
#2	-.01922	.00032	-.00514	.09983	.21364	-.00066	.00022	-.00076	-.00113	.00163	.00860
Check ?	Chk Pass	Chk Pass	Chk Fail .00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			-.00500								
Low Limit			-.00500								
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00011	-.00013	-.00411								
Stddev	.00007	.00002	.00016								
%RSD	58.165	17.125	4.0014								
#1	.00016	-.00014	-.00422								
#2	.00007	-.00011	-.00399								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2861.2	46778.	5582.7								
Stddev	8.8	69.	13.3								
%RSD	.30896	.14849	.23857								
#1	2867.4	46827.	5573.3								
#2	2854.9	46729.	5592.1								

Sample Name: CCVL3301032 Acquired: 6/1/2015 17:10:27 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01134	.11733	.01124	.11390	.01031	.00095	.10180	.22091	.00487	.01118	.00896	.01561
Stddev	.00002	.00011	.00561	.00076	.00043	.00001	.00381	.00026	.00009	.00001	.00002	.00008
%RSD	.16426	.09718	49.886	.66852	4.1454	1.3009	3.7452	.11867	1.9363	.11867	.22621	.50671
#1	.01136	.11741	.00728	.11336	.01001	.00096	.09911	.22110	.00480	.01117	.00895	.01555
#2	.01133	.11725	.01521	.11444	.01061	.00094	.10450	.22072	.00493	.01119	.00898	.01567

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10321	3.6218	F.01372	.22716	.01184	.01983	F.1.3674	.04354	.2.9364	.00639	-.01581	.00812
Stddev	.00372	.0192	.00236	.00670	.00011	.00014	.0052	.00035	.0088	.00085	.01101	.00330
%RSD	3.6030	.52942	17.217	2.9487	.95971	.72440	.38312	.79742	.29909	13.308	69.619	40.671
#1	.10058	3.6082	.01205	.23190	.01192	.01993	1.3711	.04329	2.9302	.00579	-.00803	.00578
#2	.10583	3.6354	.01539	.22242	.01176	.01972	1.3637	.04378	2.9426	.00699	-.02360	.01046

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass	Chk Pass	Chk Fail 1.0000	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00988	.59522	1.2738	.10127	.01036	.01581	.00983	.01661	F.03200	.01078	F.02634	.01075
Stddev	.00534	.02214	.0474	.00109	.00000	.00243	.00022	.00021	.00765	.00066	.00095	.00124
%RSD	54.033	3.7191	3.7191	1.0810	.01583	15.372	2.2139	1.2731	23.903	6.1524	3.6005	11.556
#1	.00611	.61088	1.3073	.10049	.01036	.01409	.00968	.01676	.02659	.01031	.02701	.01163
#2	.01366	.57957	1.2403	.10204	.01036	.01752	.00999	.01646	.03741	.01125	.02567	.00987

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000	Chk Pass	Chk Fail .02000	Chk Pass
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2846.1	46089.	5633.1									
Stddev	.8	121.	37.9									
%RSD	.02943	.26358	.67204									
#1	2845.5	46175.	5659.8									
#2	2846.7	46003.	5606.3									

Sample Name: 280-69860-H-1-B Acquired: 6/1/2015 17:13:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00079	As1890 ppm .12861	B_2089 ppm .00401	Ba4554 ppm .74437	Be3130 ppm .05420	Bi2230 ppm -.00012	Ca3179 ppm -.00550	Cd2288 ppm 390.68
#1	.00050	.12968	.00109	.75086	.05480	-.00008	-.00418	391.08	-.00001
#2	.00108	.12753	-.00912	.73789	.05361	-.00017	-.00681	390.27	.00043
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00075	Cu3247 ppm .00745	Fe2599 ppm .00308	K_7664 ppm 3.2604	Li6707 ppm 5.0166	Mg2790 ppm -.07331	Mn2576 ppm 166.76	Mo2020 ppm 2.6305
#1	-.00081	.00726	.00303	3.2568	5.0191	.07207	166.85	2.6323	.00886
#2	-.00068	.00763	.00313	3.2640	5.0140	.07455	166.66	2.6288	.00827
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 321.47	P_1782 ppm .05809	Pb2203 ppm .31258	S_1820 ppm .00052	Sb2068 ppm W 197.60	Se1960 ppm .00982	Si2881 ppm .00429	SiO2 ppm 30.044
#1	323.53	.05867	.31677	.00097	197.82	.01119	.01009	30.014	64.231
#2	319.41	.05750	.30840	.00007	197.38	.00846	-.00152	30.074	64.359
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 180.00 -.15000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .53252	Th2837 ppm 4.5546	Ti3349 ppm .00052	Tl1908 ppm .00547	U_3701 ppm W -.01391	V_2924 ppm -.03689	Zn2062 ppm -.00082	Zr3391 ppm .06910
#1	.53567	4.5828	.00060	.00534	-.01403	-.06722	-.00034	.06945	-.00212
#2	.52937	4.5264	.00043	.00559	-.01378	-.00656	-.00130	.06874	-.00576
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2562.2	Y_3774 Cts/S 42511.	377.433 {89}	5446.9			Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	2557.6	42534.	5448.4						
#2	2566.7	42489.	5445.5						

Sample Name: 280-69860-H-2-B Acquired: 6/1/2015 17:15:52 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00057	As1890 ppm .11791	B_2089 ppm -.00491	Ba4554 ppm .03247	Be3130 ppm -.00010	Bi2230 ppm -.00080	Ca3179 ppm 428.80	Cd2288 ppm .00010
#1	.00003	.11818	-.00686	4.7711	.03283	.00001	.00146	439.84	.00023
#2	.00111	.11763	-.00295	4.7610	.03211	-.00021	-.00306	417.76	-.00003
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00162	Cu3247 ppm .00965	Fe2599 ppm .00190	K_7664 ppm 11.142	Li6707 ppm 21.171	Mg2790 ppm 48965	Mn2576 ppm 292.05	Mo2020 ppm 7.2398
#1	-.00170	.00940	.00258	11.216	21.244	.49218	291.78	7.2341	-.00129
#2	-.00154	.00991	.00122	11.069	21.098	.48711	292.32	7.2455	-.00130
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 1886.6	P_1782 ppm .03548	Pb2203 ppm 1.3382	S_1820 ppm .00138	Sb2068 ppm F 1030.0	Se1960 ppm .00830	Si2881 ppm -.00129	SiO2 ppm 24.363
#1	1898.4	.03512	1.3381	.00011	1031.9	.00785	.00013	24.457	52.339
#2	1874.8	.03584	1.3382	.00266	1028.2	.00875	-.00270	24.269	51.935
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass
					-.20000				
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00249	Th2837 ppm W 7.2901	Ti3349 ppm .00192	Tl1908 ppm .00863	U_3701 ppm W -.01194	V_2924 ppm -.04503	Zn2062 ppm .00118	Zr3391 ppm .02827
#1	-.00366	7.3007	-.00008	.00896	-.01172	-.04698	.00103	.02951	-.00602
#2	-.00133	7.2796	.00393	.00831	-.01216	-.04307	.00133	.02702	-.00381
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000	Chk Pass	Chk Pass	Chk Warn 5.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
					-.01000				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2464.9	Y_3774 Cts/S 40352.	360.073 {94}	377.433 {89}				
#1	2453.5	40460.	5219.5						
#2	2476.3	40244.	5347.1						

Sample Name: 280-69872-C-2-A Acquired: 6/1/2015 17:19:50 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00053	.04079	-.00485	.08623	.08483	-.00009	-.00238	177.99	-.00030
#2	.00198	.04148	-.00283	.08595	.08447	.00004	.00239	178.22	-.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00021	.00116	.00334	.19256	6.9125	.01444	30.762	.07440	-.00267
#2	.00021	.00059	.00261	.19270	6.9881	.01326	30.599	.07341	-.00302
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	58.247	.00571	.03136	.00477	87.757	.00373	-.00422	9.0436	19.353
#2	59.152	.00470	.02634	.00320	88.028	.00423	.00100	9.1069	19.489
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00092	3.1027	-.00107	-.00041	-.00712	.03779	.00096	.00160	-.00812
#2	.00015	3.1046	.00021	.00084	-.00564	.00010	-.00007	.00149	-.00713
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2731.2	45085.	5531.6						
#2	2721.2	45405.	5536.9						

Sample Name: 280-69872-C-3-A Acquired: 6/1/2015 17:22:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00156	.05603	-.00328	.08589	.01638	-.00020	.00125	270.52	-.00022
#2	.00028	.05585	-.00822	.08662	.01604	-.00017	-.00232	266.59	-.00023
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00031	.00101	.00168	.05448	4.4974	.02895	45.982	.00179	-.00396
#2	-.00085	.00100	.00124	.05690	4.4768	.02728	46.027	.00175	-.00363
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	259.54	.00531	-.00132	.00519	232.14	.00372	.00046	11.685	25.006
#2	255.13	.00528	.00476	.00286	232.96	.00748	.00231	11.635	24.898
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00095	5.5520	-.00178	.00068	-.00894	-.00311	-.00105	.00359	-.00415
#2	-.00231	5.4744	-.00063	.00043	-.00828	.00589	-.00084	.00466	-.00246
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2666.5	43940.	5365.4						
#2	2656.3	43778.	5454.2						

Sample Name: 280-69872-C-4-A Acquired: 6/1/2015 17:25:07 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00097	As1890 ppm .65062	B_2089 ppm -.00749	Ba4554 ppm .04704	Be3130 ppm .03144	Bi2230 ppm -.00007	Ca3179 ppm -.00128	Cd2288 ppm 294.41	
#1	.00069	.65187	-.00538	.04782	.03172	-.00016	-.00044	297.49	-.00043	
#2	.00125	.64936	-.00960	.04625	.03115	.00002	-.00211	291.33	-.00006	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00037	Cu3247 ppm .00120	Fe2599 ppm .00247	K_7664 ppm .68256	Li6707 ppm 7.4612	Mg2790 ppm .02252	Mn2576 ppm 84.623	Mo2020 ppm .01246	
#1	-.00025	.00140	.00186	.68348	7.4943	.02312	84.542	.01252	-.00417	
#2	-.00048	.00100	.00307	.68164	7.4281	.02192	84.703	.01240	-.00397	
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm W 564.53	P_1782 ppm .00526	Pb2203 ppm .00985	S_1820 ppm .00469	Sb2068 ppm F 505.03	Se1960 ppm .00488	Si2881 ppm .07830	SiO2 ppm 6.6761	
#1	570.17	.00559	.00694	.00436	504.74	.00478	.07341	6.7268	14.395	
#2	558.88	.00493	.01275	.00502	505.32	.00498	.08319	6.6253	14.178	
Check ? High Limit Low Limit	Chk Warn 500.00	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
					-20000					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00150	Th2837 ppm W 6.5385	Ti3349 ppm .00063	Tl1908 ppm .01895	U_3701 ppm -.00948	V_2924 ppm W -.05386	Zn2062 ppm .00051	Zr3391 ppm .00238	
#1	-.00258	6.6051	-.00014	.02331	-.00825	-.06088	.00168	.00266	-.00517	
#2	-.00043	6.4720	.00139	.01459	-.01072	-.04683	-.00066	.00210	-.00569	
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000	Chk Pass	Chk Pass	Chk Pass	Chk Warn 45.000	Chk Pass	Chk Pass	Chk Pass	
						-.05000				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2620.7	Y_3774 Cts/S 42891.	377.433 {89}						
#1	2619.3	42691.	5275.5							
#2	2622.2	43092.	5411.2							

Sample Name: 280-69872-C-5-A Acquired: 6/1/2015 17:27:57 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00114	As1890 ppm .01833	B_2089 ppm .00455	Ba4554 ppm .04892	Be3130 ppm .04461	Bi2230 ppm -.00019	Ca3179 ppm .00088	Cd2288 ppm 271.91
#1	.00150	.01906	-.00132	.04872	.04519	-.00018	-.00141	272.82	-.00042
#2	.00078	.01759	-.00778	.04911	.04402	-.00021	.00317	271.00	-.00021
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00015	Cu3247 ppm .00103	Fe2599 ppm .00144	K_7664 ppm .03568	Li6707 ppm 3.2985	Mg2790 ppm .02552	Mn2576 ppm 31.557	Mo2020 ppm .00269
#1	-.00040	.00112	.00150	.03711	3.2444	.02578	31.594	.00269	-.00358
#2	.00009	.00094	.00138	.03424	3.3526	.02525	31.520	.00269	-.00307
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 145.28	P_1782 ppm .00485	Pb2203 ppm .01480	S_1820 ppm .00292	Sb2068 ppm 165.69	Se1960 ppm .00311	Si2881 ppm W -.00594	SiO2 ppm 11.146
#1	145.96	.00531	.01558	.00533	165.83	.00277	-.00885	11.112	23.780
#2	144.60	.00439	.01403	.00052	165.54	.00345	-.00304	11.180	23.925
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00140	Th2837 ppm 4.5826	Ti3349 ppm -.00155	Tl1908 ppm -.00014	U_3701 ppm -.00859	V_2924 ppm .00012	Zn2062 ppm -.00029	Zr3391 ppm .00165
#1	-.00156	4.6021	-.00451	-.00035	-.01017	.00801	.00019	.00181	-.00565
#2	-.00125	4.5631	.00142	.00006	-.00701	-.00777	-.00077	.00149	-.00659
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2668.5	Y_3774 Cts/S 43950.	360.073 {94}	377.433 {89}				
#1	2668.7	43931.	5490.8						
#2	2668.4	43968.	5509.2						

Sample Name: 280-69901-E-1-B Acquired: 6/1/2015 17:30:36 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00113	.05109	.00127	.03215	.19403	-.00002	.00029	53.092	.00031
#2	-.00013	.05138	-.00318	.03177	.18966	.00005	.00056	52.058	-.00009
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00004	.00599	.00202	.05325	3.2952	.01807	12.244	.00483	-.00088
#2	-.00001	.00598	.00257	.05541	3.2741	.01902	12.239	.00483	-.00072
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	20.535	.00224	.01929	.00168	13.958	-.00166	-.00895	11.007	23.554
#2	19.887	.00331	.01954	.00083	13.927	.00022	-.01013	11.017	23.577
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00014	.47617	-.00122	.00078	-.00142	-.04401	.00387	.00260	-.00519
#2	-.00187	.46727	-.00085	.00053	-.00123	-.00909	.00359	.00358	-.00241
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2802.3	45588.	5417.5						
#2	2791.8	45611.	5601.2						

Sample Name: 280-69905-B-1-A Acquired: 6/1/2015 17:33:14 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00007	As1890 ppm .21229	B_2089 ppm .00322	Ba4554 ppm .03041	Be3130 ppm .19523	Bi2230 ppm -.00011	Ca3179 ppm .00072	Cd2288 ppm 53.026
#1	-.00018	.21308	.00330	.03033	.19404	-.00010	.00085	52.663	.00003
#2	.00004	.21150	.00314	.03049	.19643	-.00012	.00059	53.389	-.00028
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00017	Cu3247 ppm .00669	Fe2599 ppm .00156	K_7664 ppm .19899	Li6707 ppm 3.2667	Mg2790 ppm .02025	Mn2576 ppm 12.185	Mo2020 ppm .00884
#1	-.00038	.00678	.00200	.19599	3.2506	.02073	12.171	.00895	-.00024
#2	.00004	.00660	.00111	.20198	3.2827	.01977	12.200	.00873	-.00092
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 19.892	P_1782 ppm .00299	Pb2203 ppm .02138	S_1820 ppm -.00058	Sb2068 ppm 13.870	Se1960 ppm .00034	Si2881 ppm -.00207	SiO2 ppm 11.380
#1	19.799	.00315	.01965	.00100	13.850	.00136	.00192	11.336	24.260
#2	19.985	.00282	.02312	-.00217	13.890	-.00069	-.00607	11.425	24.449
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00038	Th2837 ppm .47476	Ti3349 ppm .00001	Tl1908 ppm .00845	U_3701 ppm -.00375	V_2924 ppm -.01392	Zn2062 ppm .00438	Zr3391 ppm .00411
#1	-.00096	.47065	.00101	.00828	-.00149	-.00734	.00454	.00390	-.00676
#2	.00173	.47887	-.00099	.00863	-.00600	-.02051	.00421	.00432	-.00402
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2805.9	Y_3774 Cts/S 46002.	360.073 {94}	377.433 {89}				
#1	2804.6	45828.	5500.3						
#2	2807.2	46176.	5398.4						

Sample Name: 280-69905-B-2-A Acquired: 6/1/2015 17:35:51 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00013	.11038	-.00576	.02599	.15437	-.00006	-.00080	42.575	.00009
#2	.00070	.11024	-.00320	.02494	.15083	-.00004	-.00348	41.944	-.00006
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00065	.00162	.00084	.11827	2.4999	.01853	10.874	.43679	-.00084
#2	.00051	.00146	.00070	.11643	2.6312	.01999	10.818	.43410	-.00085
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	17.387	.00324	.01268	-.00035	15.758	-.00417	-.00154	10.925	23.379
#2	17.801	.00338	.01415	.00030	15.642	-.00208	-.00209	10.955	23.443
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00037	.37281	.00071	.00350	-.00565	-.03692	.00327	.00742	-.00256
#2	.00035	.36734	-.00094	.00328	-.00617	.00693	.00203	.00683	-.00534
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2819.3	46014.	5431.5						
#2	2814.8	46236.	5519.6						

Sample Name: 280-69905-B-3-A Acquired: 6/1/2015 17:38:29 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279561 6010B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00051	As1890 ppm .04268	B_2089 ppm .00189	Ba4554 ppm .03064	Be3130 ppm .14502	Bi2230 ppm -.00010	Ca3179 ppm .00035	Cd2288 ppm 38.514
#1	.00098	.04245	-.00709	.03067	.14430	-.00003	.00014	38.427	.00011
#2	.00003	.04290	.00330	.03062	.14574	-.00016	.00056	38.602	.00010
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00009	Cu3247 ppm .00126	Fe2599 ppm .00103	K_7664 ppm .06531	Li6707 ppm 2.5468	Mg2790 ppm .01990	Mn2576 ppm 9.9993	Mo2020 ppm .04038
#1	.00011	.00112	.00103	.06758	2.5319	.02066	9.9807	.04058	-.00043
#2	.00007	.00139	.00103	.06304	2.5617	.01913	10.018	.04018	-.00032
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 18.868	P_1782 ppm .00265	Pb2203 ppm .00879	S_1820 ppm .00035	Sb2068 ppm 14.444	Se1960 ppm -.00034	Si2881 ppm -.00355	SiO2 ppm 10.706
#1	18.683	.00266	.01002	.00115	14.520	-.00147	-.00636	10.663	22.820
#2	19.053	.00264	.00756	-.00045	14.368	.00079	-.00075	10.749	23.002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00048	Th2837 ppm .34744	Ti3349 ppm .00093	Tl1908 ppm .00189	U_3701 ppm -.00247	V_2924 ppm -.00816	Zn2062 ppm .00407	Zr3391 ppm .00113
#1	-.00069	.34640	-.00256	.00205	-.00162	-.01419	.00372	.00146	-.00525
#2	-.00027	.34847	.00070	.00174	-.00332	-.00214	.00441	.00081	-.00577
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2832.7	Y_3774 Cts/S 46396.	360.073 {946}	377.433 {89}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
#1	2831.0	46456.	5618.2						
#2	2834.3	46336.	5601.8						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 17:41:07 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00407	Al3092 ppm 51.557	As1890 ppm .00151	B_2089 ppm .00354	Ba4554 ppm .00114	Be3130 ppm .00012	Bi2230 ppm .95608	Ca3179 ppm .02566	Cd2288 ppm -.00031	Co2286 ppm -.00050	Cr2055 ppm .00078
#1	.00445	51.412	.00051	.00371	.00102	.00008	.96259	.02965	-.00030	-.00024	.00099
#2	.00368	51.702	.00251	.00337	.00126	.00017	.94958	.02166	-.00032	-.00075	.00057
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00226	Fe2714 ppm 49.665	K_7664 ppm .43065	Li6707 ppm .00435	Mg2790 ppm .06654	Mn2576 ppm -.00167	Mo2020 ppm -.00101	Na8183 ppm 253.94	Ni2316 ppm .00276	P_1782 ppm -.00230	Pb2203 ppm -.00225
#1	-.00241	49.350	.42986	.00271	.06916	-.00159	-.00130	253.18	.00282	-.00323	.00145
#2	-.00211	49.979	.43145	.00599	.06392	-.00175	-.00072	254.70	.00269	-.00136	.00306
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm W 4.6299	Sb2068 ppm -.01285	Se1960 ppm -.00548	Si2881 ppm .00337	SiO2 ppm .00721	Sn1899 ppm -.00240	Sr4077 ppm .00046	Th2837 ppm 5.2269	Ti3349 ppm -.01259	Tl1908 ppm .00426	U_3701 ppm 10.381
#1	4.6466	-0.01387	-0.00511	0.01585	0.03392	-.00221	0.0042	5.2265	-.01272	0.0342	10.313
#2	4.6131	-.01183	-.00585	-.00911	-.01950	-.00258	0.0049	5.2272	-.01245	0.0511	10.450
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00220	Zn2062 ppm -.00155	Zr3391 ppm -.15362								
#1	.00216	-.00157	-.15490								
#2	.00224	-.00153	-.15234								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2834.5	Y_3600 Cts/S 45839.	Y_3774 Cts/S 5572.5								
#1	2831.0	45945.	5615.6								
#2	2837.9	45733.	5529.3								

Sample Name: CCV-3296664 Acquired: 6/1/2015 17:43:43 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.51966	F .56388	.99727	.49211	.49353	.49363	.00221	5.0705	.50257	.52644	F .43766	.48806
Stddev	.00366	.00093	.00038	.00051	.00447	.00551	.00025	.0314	.00108	.00019	.00024	.00080
%RSD	.70377	.16545	.03833	.10345	.90518	1.1159	11.440	.61853	.21473	.03523	.05444	.16295
#1	.51707	.56454	.99754	.49175	.49037	.48973	.00239	5.0483	.50333	.52631	.43749	.48749
#2	.52225	.56322	.99700	.49247	.49669	.49752	.00203	5.0927	.50180	.52657	.43783	.48862

Check ? Value Range	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
		.50000									.50000	
		10.490%									-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.4967	51.750	1.0223	20.755	.54650	.50788	5.4818	.52770	1.0061	.99032	.00209	.94460
Stddev	.0225	.418	.0111	.012	.00179	.00328	.0414	.00067	.0001	.00291	.00554	.00283
%RSD	.90209	.80701	1.0863	.05890	.32748	.64679	.75555	.12613	.00815	.29360	264.79	.29987
#1	2.4807	51.455	1.0144	20.764	.54523	.51020	5.4526	.52817	1.0061	.99237	-.00182	.94660
#2	2.5126	52.046	1.0301	20.746	.54776	.50556	5.5111	.52723	1.0062	.98826	.00601	.94260

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.92671	5.1476	11.016	1.0103	.49609	-.00563	.53435	.98136	-.01005	.54327	F .58049	.49033
Stddev	.00391	.0156	.033	.0009	.00505	.00117	.00432	.00343	.02982	.00531	.00799	.00121
%RSD	.42143	.30199	.30199	.08505	1.0173	20.706	.80857	.34955	296.54	.97788	1.3768	.24741
#1	.92395	5.1586	11.039	1.0109	.49252	-.00646	.53130	.98379	.01103	.53952	.57484	.48947
#2	.92947	5.1366	10.992	1.0097	.49966	-.00481	.53741	.97893	-.03114	.54703	.58614	.49119

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass				
											.50000	
											10.490%	

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2864.8	46794.	5536.4									
Stddev	5.4	134.	24.6									
%RSD	.18862	.28740	.44468									
#1	2861.0	46889.	5553.9									
#2	2868.6	46698.	5519.0									

Sample Name: CCB Acquired: 6/1/2015 17:46:13 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.00081	.00271	.00371	.00068	-.00003	.00347	.00616	-.00040	.00004	.00040
Stddev	.00006	.00034	.00025	.00070	.00063	.00004	.00064	.00272	.00037	.00014	.00003
%RSD	40.960	42.293	9.0947	18.739	93.338	107.98	18.491	44.201	92.688	319.14	7.8821
#1	.00020	.00057	.00253	.00322	.00113	-.00001	.00301	.00808	-.00066	-.00005	.00043
#2	.00011	.00105	.00288	.00420	.00023	-.00006	.00392	.00423	-.00014	.00014	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00287	.38775	.00156	.00462	.00013	-.00041	.22468	.00041	F -.01110	-.00021
Stddev	.00014	.00365	.01168	.00015	.00040	.00004	.00035	.00068	.00002	.00532	.00026
%RSD	161.29	126.96	3.0118	9.7339	8.6989	33.936	83.904	.30243	5.7434	47.941	124.09
#1	.00018	.00545	.39601	.00167	.00433	.00010	-.00017	.22516	.00043	-.00734	-.00003
#2	-.00001	.00029	.37950	.00146	.00490	.00016	-.00066	.22420	.00040	-.01487	-.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass
High Limit											
Low Limit									-.01000		
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	-.00201	F -.00562	.01401	.02999	-.00257	.00023	-.00197	-.00027	.00354	-.00800
Stddev	.00313	.00058	.00238	.02400	.05136	.00163	.00027	.00236	.00039	.00109	.03574
%RSD	5359.8	28.833	42.358	171.29	171.29	63.599	116.85	119.45	142.99	30.673	446.64
#1	-.00215	-.00160	-.00731	.03098	.06631	-.00372	.00043	-.00031	-.00055	.00431	-.03328
#2	.00227	-.00242	-.00394	-.00296	-.00633	-.00141	.00004	-.00364	.00000	.00277	.01727
Check ?	Chk Pass	Chk Pass	Chk Fail .00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00041	-.00093	-.00604								
Stddev	.00019	.00054	.00259								
%RSD	46.964	57.712	42.829								
#1	-.00027	-.00055	-.00787								
#2	-.00054	-.00131	-.00421								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2884.7	47097.	5591.2								
Stddev	8.0	19.	34.4								
%RSD	.27570	.04023	.61542								
#1	2890.3	47084.	5566.9								
#2	2879.0	47110.	5615.6								

Sample Name: CCVL3301032II Acquired: 6/1/2015 17:48:36 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01121	.11861	.01509	.10118	.01053	.00097	.10198	.21787	.00509	.01114	.00940	.01500
Stddev	.00009	.00006	.00000	.00184	.00042	.00002	.00059	.00099	.00018	.00002	.00019	.00058
%RSD	.83006	.04870	.01481	1.8189	4.0010	1.9311	.58134	.45344	3.4589	.17599	1.9774	3.8971

#1	.01128	.11857	.01509	.10248	.01023	.00096	.10156	.21718	.00521	.01113	.00927	.01541
#2	.01115	.11865	.01509	.09988	.01083	.00099	.10240	.21857	.00496	.01115	.00953	.01458

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10370	3.5096	.01228	.22490	.01186	.01962	1.2945	.04406	2.9355	F .00548	-.00365	.00786
Stddev	.00092	.0288	.00179	.00277	.00018	.00025	.0026	.00060	.0314	.00067	.00124	.00086
%RSD	.88374	.81932	14.581	1.2306	1.4815	1.2899	.20297	1.3581	1.0702	12.133	33.965	10.876
#1	.10305	3.5299	.01102	.22686	.01173	.01980	1.2926	.04448	2.9577	.00501	-.00278	.00726
#2	.10435	3.4892	.01355	.22294	.01198	.01944	1.2963	.04363	2.9132	.00596	-.00453	.00847

Check ? Value Range	Chk Pass	Chk Fail .00900	None	Chk Pass							
									-30.000%		

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .00627	.52572	1.1250	.10147	.01034	.01464	.00982	F .01974	.05726	.01115	.02580	F .00770
Stddev	.00035	.00148	.0032	.00308	.00003	.00105	.00011	.00012	.04815	.00039	.00025	.00327
%RSD	5.5738	.28212	.28212	3.0317	.33240	7.1479	1.0949	.60604	84.089	3.4840	.95388	42.434
#1	.00652	.52677	1.1273	.10364	.01032	.01538	.00990	.01983	.02321	.01088	.02563	.00539
#2	.00602	.52467	1.1228	.09929	.01036	.01390	.00975	.01966	.09131	.01143	.02598	.01001

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .01500	Chk Pass	Chk Pass	Chk Pass	Chk Fail .01500					
								-30.000%				-30.000%

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2884.3	46799.	5676.3									
Stddev	7.6	116.	43.9									
%RSD	.26462	.24689	.77310									
#1	2878.9	46881.	5707.4									
#2	2889.7	46718.	5645.3									

Sample Name: MB 280-279427/1-B Acquired: 6/1/2015 17:51:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 6/1 Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00312	-.00408	.00365	.00044	-.00004	-.00076	.03732	.00002
Stddev	.00009	.00012	.00513	.00026	.00028	.00008	.00104	.00312	.00026
%RSD	38.947	3.7395	125.69	7.0378	64.347	184.29	135.86	8.3647	1449.4
#1	.00017	.00320	-.00045	.00347	.00024	.00001	-.00149	.03512	.00020
#2	.00031	.00303	-.00771	.00384	.00064	-.00009	-.00003	.03953	-.00017
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	-.00001	.00035	.00578	.31793	.00242	.00707	.00048	-.00054
Stddev	.00021	.00017	.00046	.00091	.01065	.00061	.01312	.00000	.00055
%RSD	152.58	2325.9	130.83	15.664	3.3499	25.214	185.51	.38280	101.92
#1	.00029	.00011	.00003	.00514	.31040	.00199	-.00220	.00048	-.00093
#2	-.00001	-.00013	.00067	.00642	.32546	.00285	.01635	.00048	-.00015
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20732	-.00034	-.00697	-.00148	.00474	-.00266	-.00563	.01278	.02736
Stddev	.01268	.00008	.00120	.00105	.00315	.00147	.00568	.02450	.05244
%RSD	6.1148	22.537	17.235	71.312	66.540	55.306	100.94	191.67	191.67
#1	.21629	-.00029	-.00782	-.00073	.00251	-.00162	-.00161	.03011	.06444
#2	.19836	-.00040	-.00612	-.00222	.00697	-.00370	-.00964	-.00454	-.00972
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00099	.00022	.00012	-.00048	.00141	-.03123	.00021	-.00006	-.00688
Stddev	.00111	.00009	.00019	.00004	.00070	.06690	.00062	.00067	.00167
%RSD	112.82	39.891	157.92	8.7586	49.406	214.23	298.45	1096.5	24.250
#1	-.00020	.00016	.00025	-.00045	.00092	-.07853	.00064	-.00053	-.00806
#2	-.00177	.00028	-.00001	-.00051	.00190	.01608	-.00023	.00041	-.00570
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2863.2	46989.	5521.7						
Stddev	1.1	86.	1.5						
%RSD	.03759	.18297	.02641						
#1	2864.0	47050.	5520.6						
#2	2862.5	46928.	5522.7						

Sample Name: LCS 280-279427/2-B Acquired: 6/1/2015 17:53:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.1006	As1890 ppm .95998	B_2089 ppm .96748	Ba4554 ppm 1.9461	Be3130 ppm .04846	Bi2230 ppm 1.8407	Ca3179 ppm 48.712	Cd2288 ppm .09764
#1	.05197	2.0981	.96304	.96618	1.9357	.04825	1.8425	48.515	.09791
#2	.05128	2.1031	.95691	.96878	1.9565	.04867	1.8389	48.908	.09737
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F .16423	Cu3247 ppm .23914	Fe2599 ppm .97840	K_7664 ppm 51.325	Li6707 ppm 1.0077	Mg2790 ppm 50.093	Mn2576 ppm .53073	Mo2020 ppm 1.0455
#1	.50147	.16439	.23925	.97558	51.177	1.0038	50.193	.53007	1.0473
#2	.50010	.16407	.23903	.98121	51.473	1.0116	49.994	.53139	1.0436
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .50202	P_1782 ppm 10.085	Pb2203 ppm .48524	S_1820 ppm 1.8406	Sb2068 ppm 48162	Se1960 ppm 1.8335	Si2881 ppm 10.219	SiO2 ppm 21.869
#1	51.477	.50253	10.080	.48489	1.8361	.48229	1.8345	10.157	21.737
#2	51.294	.50150	10.091	.48559	1.8452	.48096	1.8326	10.281	22.001
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .97551	Th2837 ppm 1.0333	Ti3349 ppm 1.0443	Tl1908 ppm 1.8888	U_3701 ppm 2.0465	V_2924 ppm .53248	Zn2062 ppm F .55535	Zr3391 ppm .45353
#1	1.9958	.97079	1.0321	1.0431	1.8815	2.0711	.53108	.55558	.45205
#2	1.9935	.98023	1.0345	1.0455	1.8962	2.0218	.53387	.55511	.45500
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .55500 .42500	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 45487.	Y_3774 Cts/S 5449.2	377.433 {89}					
#1	2762.4	45495.	5467.6						
#2	2764.0	45479.	5430.7						

Sample Name: 280-69670-B-1-B Acquired: 6/1/2015 17:56:02 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00032	.00038	-.00502	.11745	.05847	-.00002	-.00042	328.89	-.00024
#2	.00049	-.00104	-.00313	.11540	.05890	.00002	-.00169	332.68	-.00033
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00052	.00103	.00325	.03053	1.3228	.01387	70.998	.13731	-.00260
#2	-.00026	.00100	.00385	.03211	1.3265	.01484	70.889	.13769	-.00177
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	201.89	.00935	.05126	.00224	129.03	.00671	-.00259	7.9214	16.952
#2	205.34	.00918	.04693	.00423	129.21	.00582	-.00061	7.9966	17.113
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00110	1.4743	-.00137	-.00057	-.01116	.02819	-.00030	.03336	-.00366
#2	-.00305	1.4999	.00005	-.00031	-.01180	.00508	-.00115	.03319	-.00517
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2619.8	43541.	5466.7						
#2	2628.3	43341.	5379.0						

Sample Name: 280-69670-B-2-B Acquired: 6/1/2015 17:58:46 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00040	.00135	-.00231	.02732	.07206	-.00021	-.00100	150.88	.00086
#2	.00080	.00118	-.00155	.02696	.07211	.00003	-.00142	150.96	.00088
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00025	.00062	.00143	.00186	.59207	.00811	43.774	.00509	-.00307
#2	-.00005	.00084	.00176	.00403	.51138	.00747	43.788	.00488	-.00345
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	93.675	.00506	.01471	.00484	32.883	.00023	.00606	5.7501	12.305
#2	93.611	.00519	.01191	.00428	32.785	.00675	.00181	5.8581	12.536
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00187	.83833	.00067	-.00097	-.00990	-.03364	-.00049	.04182	-.00734
#2	-.00208	.83926	-.00054	-.00057	-.00780	-.01166	.00058	.03897	-.00574
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2731.1	45009.	5525.1						
#2	2737.5	45085.	5580.0						

Sample Name: 280-69670-B-3-B Acquired: 6/1/2015 18:01:24 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00080	.00195	-.00493	.04948	.02692	-.00016	-.00048	190.65	.00196
#2	.00110	.00296	.00128	.05046	.02687	.00000	.00028	190.90	.00212
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00030	.00103	.00374	.01091	2.8565	.03521	84.751	.01824	-.00281
#2	-.00032	.00118	.00337	.01403	2.9460	.03428	84.798	.01825	-.00244
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	150.00	.00788	.00089	.00391	146.49	.00234	-.00708	10.191	21.808
#2	149.84	.00746	.00112	.00683	146.05	.00583	.00044	10.219	21.868
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00175	1.6524	.00227	-.00052	-.00864	-.04141	-.00154	.02809	-.00304
#2	-.00168	1.6546	-.00189	-.00073	-.00927	.00082	-.00018	.02895	-.00681
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2695.7	44582.	5460.3						
#2	2702.9	44704.	5478.2						

Sample Name: 280-69670-B-4-B Acquired: 6/1/2015 18:04:03 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	.00149	W -.01016	.04540	.02526	-.00005	-.00390	196.70	.00159
Stddev	.00031	.00077	.00516	.00045	.00039	.00004	.00103	.19	.00010
%RSD	27.170	52.106	50.851	.98250	1.5446	71.785	26.356	.09901	6.3907
#1	.00134	.00094	-.01381	.04508	.02553	-.00003	-.00463	196.84	.00166
#2	.00091	.00203	-.00650	.04571	.02498	-.00008	-.00318	196.57	.00152
Check ?	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	.00082	.00269	.02952	2.7085	.03209	88.195	.02118	-.00257
Stddev	.00003	.00036	.00081	.00229	.0121	.00034	.054	.00006	.00070
%RSD	11.861	43.505	30.045	7.7745	.44548	1.0687	.06119	.30187	27.366
#1	-.00028	.00107	.00326	.03114	2.6999	.03185	88.233	.02122	-.00306
#2	-.00024	.00057	.00212	.02789	2.7170	.03233	88.157	.02113	-.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.56	.00787	-.00115	.00525	153.25	.00596	.00128	10.610	22.705
Stddev	.40	.00069	.00393	.00060	.27	.00090	.00045	.007	.015
%RSD	.26078	8.7293	341.21	11.345	.17666	15.129	35.169	.06425	.06425
#1	152.27	.00739	-.00393	.00567	153.06	.00660	.00097	10.615	22.715
#2	152.84	.00836	.00163	.00483	153.45	.00532	.00160	10.605	22.695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	1.6912	-.00170	-.00055	W -.01016	.00806	-.00112	.02607	-.00615
Stddev	.00267	.00000	.00107	.00009	.00218	.00507	.00011	.00012	.00012
%RSD	882.45	.00073	63.335	17.266	21.493	62.889	9.4319	.44185	2.0257
#1	-.00159	1.6912	-.00094	-.00061	-.00862	.00447	-.00104	.02599	-.00606
#2	.00219	1.6912	-.00246	-.00048	-.01170	.01164	-.00119	.02615	-.00624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}	Cts/S	Cts/S	Cts/S			
Units									
Avg	2691.0	44941.	5528.9	8.	11.1				
Stddev	.2								
%RSD	.00889	.01782	.20073						
#1	2691.2	44947.	5521.0						
#2	2690.8	44936.	5536.7						

Sample Name: 280-69670-B-5-B Acquired: 6/1/2015 18:06:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00084	.39534	-.00060	.00696	.39503	-.00002	.00746	139.26	-.00035
#2	.00028	.39441	-.00106	.00666	.40191	-.00006	.00252	141.50	-.00032
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00148	.00070	.00522	.09251	5.3360	.10864	.03359	.00042	-.00283
#2	.00105	.00027	.00506	.09657	5.4337	.11196	.03699	.00044	-.00239
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	88.462	.00942	-.00337	.00244	3.3025	.00527	-.00374	4.3399	9.2873
#2	89.700	.01031	-.00378	.00653	3.3122	.00053	-.00187	4.4001	9.4162
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00103	5.9742	-.00106	-.00143	-.00544	-.00755	.00244	.00033	-.00789
#2	-.00266	6.0915	.00135	-.00122	-.01052	-.01140	.00193	.00039	-.00608
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2769.0	45718.	5567.5						
#2	2764.0	45754.	5484.7						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 18:09:27 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00426	51.107	.00338	.00033	.00074	.00008	.97391	.03689	-.00038	-.00039	.00078
Stddev	.00015	.025	.00238	.00026	.00024	.00005	.00359	.00349	.00022	.00011	.00024
%RSD	3.4429	.04846	70.207	78.888	32.541	62.684	.36854	9.4605	57.607	28.940	30.411
#1	.00416	51.090	.00170	.00014	.00091	.00011	.97137	.03442	-.00054	-.00031	.00061
#2	.00437	51.125	.00506	.00051	.00057	.00004	.97645	.03936	-.00023	-.00047	.00094
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00165	49.368	.33614	.00479	.05563	-.00159	-.00086	251.35	.00263	-.00570	-.00200
Stddev	.00032	.026	.05655	.00291	.00024	.00007	.00019	.86	.00029	.00046	.00051
%RSD	19.332	.05168	16.825	60.646	.43442	4.5613	22.109	.34118	11.138	8.1226	25.759
#1	-.00142	49.350	.29615	.00685	.05580	-.00154	-.00073	250.74	.00283	-.00602	-.00163
#2	-.00187	49.386	.37613	.00274	.05546	-.00164	-.00100	251.96	.00242	-.00537	-.00236
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	TI1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 4.7038	-.00931	.00214	.00022	.00046	-.00220	.00063	5.2114	-.01267	.00115	W 10.597
Stddev	.0442	.00144	.00119	.01631	.03490	.00072	.00001	.0018	.00026	.00236	.193
%RSD	.93985	15.492	55.786	7557.8	7557.8	32.753	1.3753	.03392	2.0892	204.41	1.8231
#1	4.6725	-.00829	.00129	-.01132	-.02422	-.00271	.00062	5.2126	-.01285	-.00051	10.461
#2	4.7350	-.01034	.00298	.01175	.02514	-.00169	.00063	5.2101	-.01248	.00282	10.734
Check ?	Chk Warn	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value Range	5.0000	-5.0000%									10.0000
											5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00316	-.00182	-.15311								
Stddev	.00049	.00080	.00183								
%RSD	15.535	44.073	1.1932								
#1	.00281	-.00126	-.15182								
#2	.00351	-.00239	-.15440								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2832.3	46368.	5660.4								
Stddev	4.5	112.	1.7								
%RSD	.15729	.24224	.03012								
#1	2835.5	46448.	5661.6								
#2	2829.2	46289.	5659.2								

Sample Name: CCV-3296664 Acquired: 6/1/2015 18:12:02 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.52416 F	.56805	.98372	.49526	.49127	.49090	.00109	.50295	.50549	.52997	F .44010	.49176
Stddev	.00068	.00146	.00364	.00563	.00646	.00599	.00320	.0404	.00310	.00787	.00521	.00112
%RSD	.12943	.25750	.36994	1.1364	1.3147	1.2207	292.96	.80301	.61384	1.4846	1.1845	.22815

#1	.52464	.56909	.98629	.49924	.48670	.48666	-.00117	5.0010	.50768	.53553	.44379	.49256
#2	.52368	.56702	.98115	.49128	.49583	.49514	.00335	5.0581	.50330	.52440	.43641	.49097

Check ? Value Range	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
		.50000									.50000	
		10.490%									-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.4859	51.621	1.0201	20.769	.54802	.51163	5.4203	.53071	1.0190	.99909	-.00965	.95704
Stddev	.0066	.570	.0064	.026	.00021	.00773	.0143	.00618	.0150	.01601	.00230	.02136
%RSD	.26472	1.1036	.63016	.12412	.03783	1.5101	.26426	1.1640	1.4681	1.6023	23.793	2.2315
#1	2.4812	51.218	1.0156	20.751	.54817	.51709	5.4102	.53508	1.0295	1.0104	-.01127	.97214
#2	2.4905	52.023	1.0247	20.788	.54788	.50617	5.4304	.52634	1.0084	.98778	-.00802	.94194

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.94264	5.1001	10.914	1.0236	.49441	-.00453	.53548	.99404	-.04276	.54942	F .58327	.48900
Stddev	.02369	.0519	.111	.0102	.00644	.00146	.00002	.01793	.00269	.00111	.00659	.00267
%RSD	2.5132	1.0180	1.0180	.99942	1.3020	32.137	.00405	1.8035	6.2911	.20202	1.1295	.54580
#1	.95939	5.0634	10.836	1.0308	.48986	-.00350	.53546	1.0067	-.04086	.54864	.58793	.48711
#2	.92589	5.1368	10.993	1.0164	.49896	-.00556	.53549	.98136	-.04467	.55021	.57862	.49088

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass				
											.50000	
											10.490%	

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2860.2	46555.	5578.4									
Stddev	9.3	101.	41.2									
%RSD	.32437	.21594	.73825									
#1	2853.6	46484.	5607.5									
#2	2866.7	46626.	5549.3									

Sample Name: CCB Acquired: 6/1/2015 18:14:32 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	-.00049	.00250	.00092	.00021	.00002	.00046	.01982	-.00036	.00014	.00028
Stddev	.00007	.00042	.00351	.00019	.00005	.00003	.00046	.00592	.00002	.00005	.00011
%RSD	89.198	84.923	140.45	21.069	21.987	178.78	100.32	29.839	5.2935	37.593	37.335
#1	.00003	-.00020	.00002	.00079	.00018	.00000	.00078	.02401	-.00034	.00017	.00036
#2	.00013	-.00079	.00498	.00106	.00024	.00003	.00013	.01564	-.00037	.00010	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00394	.28755	.00259	.00403	.00022	-.00020	.14865	.00045	F -.01201	-.00123
Stddev	.00019	.00277	.05720	.00170	.00306	.00000	.00027	.00115	.00031	.00097	.00244
%RSD	266.41	70.242	19.893	65.642	76.018	2.2476	137.16	.77103	68.988	8.1064	198.78
#1	-.00006	.00590	.32800	.00380	.00619	.00022	-.00039	.14784	.00067	-.01270	-.00295
#2	.00020	.00198	.24710	.00139	.00186	.00022	-.00001	.14946	.00023	-.01132	.00050
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass							
High Limit									.01000		
Low Limit									-.01000		
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01211	-.00263	-.00372	.01993	.04266	-.00185	.00017	-.00014	-.00031	.00385	-.00569
Stddev	.00320	.00152	.00099	.00619	.01325	.00146	.00011	.00140	.00018	.00355	.04842
%RSD	26.458	57.787	26.759	31.049	31.049	78.925	66.791	1030.9	56.333	92.117	850.45
#1	-.00985	-.00155	-.00442	.01556	.03329	-.00289	.00025	.00085	-.00019	.00134	.02854
#2	-.01438	-.00370	-.00301	.02431	.05203	-.00082	.00009	-.00112	-.00044	.00636	-.03993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00006	.00087	-.00509								
Stddev	.00027	.00057	.00260								
%RSD	477.97	65.964	51.101								
#1	.00014	.00127	-.00325								
#2	-.00025	.00046	-.00692								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2866.3	46819.	5568.4								
Stddev	7.4	106.	3.3								
%RSD	.25788	.22594	.05928								
#1	2861.1	46745.	5570.7								
#2	2871.5	46894.	5566.1								

Sample Name: CCVL3301032 Acquired: 6/1/2015 18:16:54 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01094	.11667	.01445	.10050	.01045	.00099	.10274	.21520	.00503	.01091	.00919	.01518
Stddev	.00081	.00033	.00351	.00079	.00019	.00007	.00508	.00109	.00015	.00019	.00035	.00023
%RSD	7.4060	.28274	24.303	.78253	1.8244	7.2933	4.9420	.50459	2.9446	1.7451	3.7703	1.5009

#1	.01037	.11690	.01693	.09994	.01059	.00105	.09915	.21597	.00492	.01078	.00943	.01535
#2	.01152	.11644	.01196	.10105	.01032	.00094	.10633	.21443	.00513	.01105	.00894	.01502

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10085	3.5179	F.01365	.22816	.01180	.02018	1.2237	.04399	2.9480	.00809	-.00716	.00714
Stddev	.00436	.0377	.00112	.00037	.00020	.00052	.0103	.00020	.0155	.00167	.00205	.00336
%RSD	4.3191	1.0722	8.2214	.16090	1.6604	2.5840	.83890	.45706	.52670	20.646	28.555	47.007

#1	.09777	3.4913	.01444	.22842	.01166	.02054	1.2310	.04385	2.9370	.00691	-.00861	.00477
#2	.10393	3.5446	.01285	.22790	.01194	.01981	1.2164	.04413	2.9590	.00927	-.00572	.00952

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
			30.000%									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00927	.53415	1.1431	.10090	.01030	.01455	.00993	.01871	.05265	.01068	F.02609	.00810
Stddev	.00097	.03060	.0655	.00028	.00007	.00322	.00048	.00332	.07304	.00076	.00043	.00115

#1	.00995	.51251	1.0968	.10110	.01035	.01227	.00958	.01636	.10430	.01122	.02640	.00892
#2	.00858	.55579	1.1894	.10070	.01025	.01683	.01027	.02106	.00100	.01015	.02579	.00729

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .02000	Chk Fail .01500								
			-30.000%								30.000%	-30.000%

Int. Std. Units	Y_2243 Cts/S		Y_3600 Cts/S
Avg	2888.1	46943.	5595.7
Stddev	6.3	16.	45.8
%RSD	.21833	.03493	.81820

#1	2892.5	46955.	5563.3
#2	2883.6	46931.	5628.1

Sample Name: 280-69670-N-6-D Acquired: 6/1/2015 18:19:33 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00112	.00082	.00321	.05972	.03714	-.00021	-.00225	42.617	-.00030
#2	.00047	.00168	-.00135	.06010	.03805	-.00005	.00015	43.616	-.00005
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00011	.00069	.00166	.02088	5.6573	.01528	8.4302	.02077	-.00192
#2	.00008	.00046	.00103	.01894	5.7573	.01436	8.4222	.02073	-.00214
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	24.738	.00340	-.00565	.00215	8.6971	-.00019	-.00583	2.4285	5.1971
#2	24.922	.00317	-.00424	.00108	8.6544	-.00136	-.00188	2.4618	5.2682
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00090	.34049	.00335	-.00082	-.00192	-.09426	.00057	-.00059	-.00701
#2	-.00037	.34779	-.00058	-.00098	-.00142	-.03197	-.00106	-.00046	-.00518
Check ? High Limit Low Limit	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2810.8	46262.	5614.0						
#2	2812.1	46320.	5490.6						

Sample Name: 280-69670-N-6-D SD@5 Acquired: 6/1/2015 18:22:12 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00079	.00027	-.00605	.01223	.00681	.00009	.00000	7.8118	-.00014
#2	.00045	.00022	.00326	.01053	.00675	-.00005	.00047	7.8483	-.00046
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00027	.00023	.00068	.00846	1.2622	.00354	1.5805	.00390	-.00088
#2	.00013	.00070	.00030	.00450	1.2801	.00439	1.5915	.00399	-.00029
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	4.6104	.00189	-.00687	-.00124	1.6592	-.00393	-.00440	.41147	.88054
#2	4.6069	.00167	-.00653	-.00251	1.7050	.00049	-.00681	.46005	.98452
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00551	.06257	.00444	-.00041	.00254	.01548	-.00006	.00009	-.00544
#2	.00430	.06363	-.00009	-.00138	.00093	.00722	-.00071	-.00009	-.00701
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2852.3	46729.	5553.6						
#2	2837.7	46406.	5584.4						

Sample Name: 280-69670-N-6-E MS Acquired: 6/1/2015 18:24:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.05069	2.0914	.97424	1.0216	1.9564	.04791	1.8551	90.276	.09799
#2	.05063	2.0824	.97375	1.0202	2.0246	.04963	1.8352	93.244	.09743
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.50260	.16368	.24330	.97471	55.942	1.0098	58.580	.55244	1.0520
#2	.50082	.16305	.24204	1.0161	58.167	1.0472	58.360	.55190	1.0464
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	77.765	.50347	10.219	.48125	10.848	.48719	1.8595	12.590	26.943
#2	80.804	.50208	10.169	.48349	10.796	.47968	1.8680	13.148	28.137
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0152	1.3061	1.0415	1.0477	1.8778	2.0833	.53775	.55091	.46048
#2	2.0098	1.3510	1.0338	1.0468	1.8975	1.9913	.53758	.55129	.48117
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2730.5	44801.	5573.2						
#2	2731.9	45028.	5425.5						

Sample Name: 280-69670-N-6-F MSD Acquired: 6/1/2015 18:27:17 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.1025	As1890 ppm .97414	B_2089 ppm 1.0266	Ba4554 ppm 1.9737	Be3130 ppm .04797	Bi2230 F 1.8641	Ca3179 ppm 90.989	Cd2288 ppm .09914
#1	.05238	2.1068	.96923	1.0272	1.9684	.04799	1.8655	90.772	.09919
#2	.05188	2.0982	.97904	1.0260	1.9790	.04794	1.8628	91.207	.09909
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm W .16518	Cu3247 ppm .24516	Fe2599 ppm .98278	K_7664 ppm 56.670	Li6707 ppm 1.0223	Mg2790 ppm 58.776	Mn2576 ppm .55592	Mo2020 ppm 1.0576
#1	.50646	.16525	.24563	.98427	56.577	1.0172	58.874	.55596	1.0580
#2	.50678	.16511	.24469	.98129	56.763	1.0273	58.677	.55588	1.0572
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 78.534	P_1782 ppm .50731	Pb2203 ppm W 10.281	S_1820 ppm .48883	Sb2068 ppm 10.918	Se1960 ppm 48327	Si2881 ppm 1.8697	SiO2 ppm 12.709
#1	78.467	.50735	10.306	.49097	10.941	.48857	1.8814	12.663	27.099
#2	78.602	.50728	10.257	.48668	10.896	.47797	1.8579	12.754	27.294
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm W 2.0167	Th2837 ppm 1.3178	Ti3349 ppm 1.0469	Tl1908 ppm 1.0525	U_3701 ppm 1.8992	V_2924 ppm 2.0896	Zn2062 ppm .54054	Zr3391 ppm .55296
#1	2.0446	1.3146	1.0497	1.0518	1.9229	2.0420	.54032	.55295	.45849
#2	1.9888	1.3209	1.0441	1.0531	1.8756	2.1373	.54076	.55298	.46178
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2739.2	Y_3774 Cts/S 45189.	377.433 {89}				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	2738.4	45283.	5583.6						
#2	2740.0	45095.	5589.0						

Sample Name: 280-69670-B-7-B Acquired: 6/1/2015 18:29:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	.00120	-.00630	.02606	.06733	-.00015	.00113	257.11	-.00026
Stddev	.00067	.00008	.00007	.00171	.00113	.00010	.00181	3.08	.00012
%RSD	57.370	6.7515	1.0767	6.5751	1.6750	66.811	160.53	1.1961	44.422
#1	.00165	.00126	-.00635	.02485	.06653	-.00008	.00241	254.94	-.00034
#2	.00070	.00115	-.00625	.02727	.06812	-.00022	-.00015	259.29	-.00018
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00080	.00179	.00941	.74533	.00947	30.891	.46726	-.00276
Stddev	.00028	.00007	.00065	.00046	.02025	.00006	.103	.00044	.00030
%RSD	279.02	8.9404	36.423	4.8820	2.7169	.68191	.33339	.09448	10.938
#1	.00010	.00085	.00133	.00909	.73101	.00942	30.964	.46694	-.00254
#2	-.00029	.00075	.00225	.00974	.75965	.00952	30.818	.46757	-.00297
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	129.17	.01159	.00101	.00414	75.989	.00501	.00085	5.6838	12.163
Stddev	2.50	.00011	.00478	.00062	.041	.00236	.00366	.0225	.048
%RSD	1.9332	.92412	471.39	14.896	.05358	47.034	433.49	.39564	.39564
#1	127.40	.01166	-.00237	.00370	76.018	.00334	-.00175	5.6679	12.129
#2	130.93	.01151	.00439	.00457	75.960	.00667	.00344	5.6997	12.197
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00055	1.2996	-.00062	-.00150	-.00892	.01686	-.00075	.03686	-.00696
Stddev	.00117	.0172	.00006	.00001	.00071	.03785	.00094	.00088	.00075
%RSD	211.40	1.3217	9.6768	.91082	8.0014	224.44	126.06	2.3834	10.750
#1	.00027	1.2875	-.00066	-.00151	-.00841	-.00990	-.00008	.03748	-.00643
#2	-.00138	1.3117	-.00058	-.00149	-.00942	.04363	-.00142	.03624	-.00749
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2694.0	44547.	5469.7						
Stddev	9.2	54.	51.6						
%RSD	.34180	.12074	.94320						
#1	2687.5	44585.	5506.1						
#2	2700.5	44509.	5433.2						

Sample Name: 280-69670-B-8-B Acquired: 6/1/2015 18:32:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00093	As1890 ppm .00376	B_2089 ppm .00049	Ba4554 ppm .16116	Be3130 ppm .09363	Bi2230 ppm -.00007	Ca3179 ppm .00255	Cd2288 ppm 44.088
#1	.00093	.00348	-.00252	1.6134	.09344	-.00009	.00157	44.308	.00016
#2	.00094	.00403	.00349	1.6099	.09382	-.00005	.00352	43.869	.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00014	Cu3247 ppm .00047	Fe2599 ppm .00167	K_7664 ppm .00072	Li6707 ppm 2.3277	Mg2790 ppm .01999	Mn2576 ppm 28.236	Mo2020 ppm .00075
#1	-.00001	.00048	.00180	.00286	2.2818	.01788	28.263	.00086	.00078
#2	-.00027	.00046	.00153	-.00142	2.3736	.02209	28.209	.00063	.00048
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 86.361	P_1782 ppm .00333	Pb2203 ppm -.00555	S_1820 ppm .00254	Sb2068 ppm 10.080	Se1960 ppm -.00188	Si2881 ppm W -.00665	SiO2 ppm 6.7324
#1	86.681	.00278	-.00759	.00265	10.040	-.00224	-.00623	6.7368	14.417
#2	86.040	.00388	-.00350	.00244	10.121	-.00152	-.00707	6.7280	14.398
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00074	Th2837 ppm 2.2685	Ti3349 ppm -.00123	Tl1908 ppm -.00087	U_3701 ppm -.00157	V_2924 ppm -.03607	Zn2062 ppm -.00080	Zr3391 ppm .01440
#1	.00026	2.2804	.00169	-.00050	-.00147	-.05329	-.00114	.01443	-.00522
#2	-.00174	2.2566	-.00415	-.00124	-.00166	-.01885	-.00046	.01437	-.00393
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2787.8	Y_3774 Cts/S 45987.	377.433 {89}					
#1	2782.4	46064.	5554.0						
#2	2793.2	45910.	5608.5						

Sample Name: 280-69670-B-9-B Acquired: 6/1/2015 18:34:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00042	As1890 ppm .00199	B_2089 ppm .00390	Ba4554 ppm .04744	Be3130 ppm .08163	Bi2230 ppm -.00014	Ca3179 ppm .00038	Cd2288 ppm 130.43
#1	.00022	.00288	-.00582	.04696	.08203	-.00018	.00193	131.68	.00282
#2	.00063	.00109	-.00198	.04791	.08122	-.00009	-.00117	129.18	.00216
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm -.00022	Cu3247 ppm .00066	Fe2599 ppm .00189	K_7664 ppm .00563	Li6707 ppm 1.4532	Mg2790 ppm .00741	Mn2576 ppm 42.040	Mo2020 ppm .00163
#1	-.00013	.00088	.00175	.00748	1.4629	.00884	41.948	.00160	-.00181
#2	-.00030	.00044	.00203	.00377	1.4436	.00599	42.133	.00166	-.00236
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 130.67	P_1782 ppm .00489	Pb2203 ppm -.00545	S_1820 ppm .00360	Sb2068 ppm 39.280	Se1960 ppm .00112	Si2881 ppm -.00231	SiO2 ppm 6.6189
#1	133.31	.00478	-.00453	.00438	39.326	.00387	-.00606	6.6146	14.155
#2	128.03	.00501	-.00637	.00283	39.235	-.00163	.00144	6.6231	14.174
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00142	Th2837 ppm 1.1364	Ti3349 ppm .00007	Tl1908 ppm -.00050	U_3701 ppm -.00638	V_2924 ppm -.03068	Zn2062 ppm -.00074	Zr3391 ppm .11578
#1	-.00190	1.1468	-.00127	-.00061	-.00752	-.01871	-.00067	.11736	-.00473
#2	-.00094	1.1260	.00141	-.00039	-.00524	-.04265	-.00080	.11420	-.00561
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2729.3	Y_3774 Cts/S 45204.	360.073 {94}	377.433 {89}				
#1	2728.5	45214.	5565.1						
#2	2730.1	45194.	5690.2						

Sample Name: 280-69670-N-6-E MS Acquired: 6/1/2015 18:37:37 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05199	2.0944	.98250	1.0349	1.9609	.04811	F 1.8676	90.214	.09928
Stddev	.00070	.0018	.00579	.0049	.0193	.00001	.0110	.773	.00035
%RSD	1.3440	.08748	.58952	.47333	.98179	.02328	.59044	.85650	.35008
#1	.05249	2.0931	.97841	1.0384	1.9473	.04810	1.8754	89.667	.09953
#2	.05150	2.0957	.98660	1.0315	1.9745	.04812	1.8598	90.760	.09904
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass					
High Limit							.10000		
Low Limit							-.10000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50374	W 16455	.24395	.97933	56.370	1.0161	58.524	.55463	1.0582
Stddev	.00001	.00010	.00198	.00529	.542	.0149	.280	.00046	.0024
%RSD	.00296	.05934	.81203	.53977	.96157	1.4707	.47864	.08316	.22747
#1	.50373	.16462	.24535	.98307	55.986	1.0055	58.722	.55496	1.0599
#2	.50375	.16448	.24255	.97559	56.753	1.0266	58.326	.55431	1.0565
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.099	.50414	W 10.285	.48478	10.898	.48792	1.8709	12.599	26.962
Stddev	.076	.00144	.047	.00225	.059	.00271	.0145	.066	.142
%RSD	.09764	.28547	.45500	.46400	.54511	.55618	.77733	.52653	.52653
#1	78.045	.50516	10.318	.48637	10.940	.48984	1.8812	12.552	26.861
#2	78.153	.50312	10.252	.48319	10.856	.48601	1.8606	12.646	27.062
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-.1.0000						
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0009	1.3109	1.0480	1.0550	1.8898	2.1072	.54282	.55234	.45727
Stddev	.0100	.0120	.0031	.0015	.0094	.0323	.00000	.00190	.00155
%RSD	.50135	.91458	.29603	.14429	.49522	1.5313	.00047	.34397	.33988
#1	1.9938	1.3024	1.0458	1.0561	1.8964	2.1300	.54282	.55369	.45837
#2	2.0080	1.3194	1.0501	1.0539	1.8832	2.0844	.54282	.55100	.45617
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}	Cts/S	Cts/S	Cts/S			
Units	Cts/S	Cts/S	Cts/S						
Avg	2748.6	45278.	5637.9						
Stddev	3.1	20.	44.3						
%RSD	.11395	.04427	.78578						
#1	2750.8	45264.	5669.2						
#2	2746.4	45292.	5606.6						

Sample Name: 280-69670-N-6-F MSD Acquired: 6/1/2015 18:40:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279623 6010B (Mn)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.05088	2.1084	.98495	1.0413	2.0240	.04959	1.8694	93.212	.09968
#2	.05236	2.1071	.98555	1.0380	2.0071	.04860	1.8742	92.209	.09987
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.50910	.16618	.24577	1.0017	58.361	1.0508	58.595	.55848	1.0623
#2	.50709	.16575	.24716	1.0030	57.385	1.0387	58.819	.55870	1.0619
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	79.057	.51019	10.373	.49003	10.995	.48750	1.8866	12.682	27.140
#2	78.969	.50783	10.374	.49109	10.964	.48588	1.8815	12.785	27.361
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	2.0294	1.3516	1.0517	1.0590	1.9048	2.1031	.54508	.55656	.46271
#2	2.0259	1.3402	1.0525	1.0579	1.8954	2.0634	.54421	.55260	.45874
Check ? High Limit Low Limit	Chk Warn 2.0000 -.05000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2747.5	45241.	5479.0						
#2	2738.5	45315.	5575.9						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 18:42:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00385	51.560	-00210	.00339	.00110	.00007	.97488	.03627	-.00053	.00002	.00047
Stddev	.00014	.178	.00390	.00040	.00035	.00018	.00152	.00293	.00024	.00037	.00017
%RSD	3.5092	.34520	185.88	11.950	32.136	253.52	.15594	8.0839	45.817	2172.0	36.389
#1	.00376	51.686	.00066	.00310	.00085	.00020	.97380	.03420	-.00070	-.00025	.00060
#2	.00395	51.434	-.00486	.00367	.00135	-.00006	.97595	.03835	-.00036	.00028	.00035
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00232	49.323	.39842	.00309	.06273	-.00164	-.00087	254.04	.00268	-.00072	-.00010
Stddev	.00006	.408	.03602	.00139	.00107	.00009	.00056	1.67	.00008	.00053	.00259
%RSD	2.7030	.82694	9.0412	44.890	1.7022	5.3404	64.309	.65665	3.0200	74.377	2718.2
#1	-.00236	49.034	.42390	.00407	.06197	-.00158	-.00048	255.22	.00273	-.00034	-.00193
#2	-.00227	49.611	.37295	.00211	.06348	-.00170	-.00127	252.86	.00262	-.00110	.00174
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 4.6578	-.01088	-.00034	-.00147	-.00316	-.00247	.00047	5.2103	-.01295	.00180	10.410
Stddev	.0178	.00195	.00480	.01515	.03242	.00102	.00003	.0008	.00053	.00085	.048
%RSD	.38232	17.881	1409.1	1027.0	1027.0	41.141	6.2432	.01510	4.0714	47.530	.46130
#1	4.6452	-.01226	-.00374	.00924	.01977	-.00175	.00045	5.2098	-.01332	.00240	10.376
#2	4.6704	-.00950	.00305	-.01219	-.02608	-.00319	.00049	5.2109	-.01258	.00119	10.444
Check ?	Chk Warn 5.0000	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value Range	-5.0000%										
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00329	-.00198	-.15660								
Stddev	.00021	.00085	.00032								
%RSD	6.4051	43.172	.20721								
#1	.00344	-.00258	-.15683								
#2	.00315	-.00137	-.15637								
Check ?	None	None	None								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2819.9	45952.	5565.9								
Stddev	7.6	266.	35.0								
%RSD	.26941	.57805	.62943								
#1	2825.3	46139.	5541.1								
#2	2814.5	45764.	5590.6								

Sample Name: CCV-3296664 Acquired: 6/1/2015 18:45:00 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.52270	F .56713	.99795	.49523	.49623	.49358	.00156	5.0423	.50559	.52859	F .43041	.49333
Stddev	.00192	.00381	.00484	.00188	.00114	.00164	.00226	.0228	.00086	.00145	.00135	.00253
%RSD	.36799	.67222	.48522	.37928	.23019	.33126	144.23	.45152	.16974	.27338	.31375	.51188

#1	.52406	.56983	.99452	.49390	.49543	.49243	-0.0003	5.0262	.50499	.52757	.42945	.49512
#2	.52134	.56444	1.0014	.49655	.49704	.49474	.00316	5.0584	.50620	.52961	.43136	.49154

Check ? Value Range	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
		.50000									.50000	
		10.490%									-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.4768	52.271	1.0323	20.938	.54577	.51087	5.3964	.52883	1.0103	1.0015	-.01732	.95591
Stddev	.0009	.123	.0015	.044	.00027	.00353	.0313	.00411	.0053	.0062	.01057	.01113
%RSD	.03587	.23481	.14710	.20797	.05013	.69107	.57945	.77764	.52071	.62307	61.043	1.1643

#1	2.4761	52.184	1.0312	20.969	.54558	.50837	5.3743	.52592	1.0065	.99711	-.00985	.94804
#2	2.4774	52.358	1.0334	20.907	.54597	.51336	5.4185	.53174	1.0140	1.0059	-.02480	.96378

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.93642	5.1226	10.962	1.0198	.49802	-.00418	.53460	.99456	.00408	.54581	F .58430	.48729
Stddev	.00216	.0536	.115	.0056	.00113	.00381	.00069	.00582	.00325	.00114	.00034	.00206
%RSD	.23061	1.0462	1.0462	.54840	.22698	90.989	.12828	.58522	79.651	.20973	.05869	.42298

#1	.93795	5.0847	10.881	1.0159	.49722	-.00688	.53412	.99045	0.0637	.54500	.58454	.48584
#2	.93489	5.1605	11.043	1.0238	.49882	-.00149	.53509	.99868	.00178	.54662	.58405	.48875

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass				
											.50000	
											10.490%	

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2811.9	45801.	5374.5									
Stddev	.5	32.	34.9									
%RSD	.01628	.07085	.64865									

#1	2812.2	45778.	5399.1									
#2	2811.5	45824.	5349.8									

Sample Name: CCB Acquired: 6/1/2015 18:47:30 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00007	-0.00050	.00118	.00189	.00067	-.00003	.00279	.00932	-.00028	.00008	.00022	.00061	.00561
Stddev	.00018	.00022	.00323	.00001	.00092	.00019	.00161	.00911	.00011	.00005	.00009	.00040	.00285
%RSD	250.39	44.229	273.41	67852	136.72	652.35	57.702	97.767	39.554	62.764	41.867	64.484	50.721

#1	.00006	-.00066	-.00110	.00188	.00132	.00010	.00393	.01577	-.00020	.00004	.00028	.00089	.00763
#2	-.00020	-.00035	.00346	.00190	.00002	-.00016	.00165	.00288	-.00036	.00012	.00015	.00033	.00360

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34890	.00558	.00210	.00026	-.00083	.13648	.00056	-.00729	-.00030	-.01518	-.00113	-.00296	.01390
Stddev	.06600	.00071	.00661	.00001	.00050	.03302	.00010	.00021	.00085	.00262	.00147	.00354	.00870
%RSD	18.918	12.761	314.55	3.7319	60.588	24.191	17.878	2.9186	282.93	17.268	130.48	119.63	62.618

#1	.30223	.00508	.00678	.00025	-.00118	.15982	.00049	-.00744	.00030	-.01704	-.00217	-.00546	.00775
#2	.39558	.00609	-.00257	.00026	-.00047	.11313	.00064	-.00714	-.00091	-.01333	-.00009	-.00046	.02006

Check ?	Chk Pass												
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391			
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Avg	.02975	-.00197	.00041	-.00144	-.00054	.00241	-.02393	.00029	.00036	-.00723			
Stddev	.01863	.00015	.00018	.00063	.00027	.00273	.01174	.00035	.00059	.00383			
%RSD	62.618	7.5687	42.934	43.844	49.912	113.01	49.078	122.31	164.44	52.915			

#1	.01658	-.00186	.00053	-.00189	-.00035	.00434	-.03224	.00053	.00078	-.00453			
#2	.04292	-.00207	.00028	-.00099	-.00073	.00048	-.01563	.00004	-.00006	-.00994			

Check ?	Chk Pass												
High Limit													
Low Limit													

Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	2841.7	46349.	5501.3										
Stddev	6.0	17.	33.9										
%RSD	.21014	.03733	.61577										

#1	2837.4	46361.	5525.2										
#2	2845.9	46337.	5477.3										

Sample Name: CCVL3301032 Acquired: 6/1/2015 18:49:52 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01097	.11948	.01087	.10313	.01049	.00098	.10564	.21757	.00518	.01135	.00922	.01542
Stddev	.00047	.00107	.00062	.00214	.00014	.00005	.00130	.00164	.00024	.00003	.00023	.00071
%RSD	4.2628	.89701	5.6945	2.0745	1.3066	4.7244	1.2269	.75490	4.5563	.26139	2.5099	4.5774
#1	.01064	.12023	.01043	.10465	.01059	.00095	.10472	.21873	.00535	.01137	.00939	.01492
#2	.01130	.11872	.01131	.10162	.01039	.00101	.10656	.21641	.00501	.01133	.00906	.01591

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10371	3.5153	F .01500	.22482	.01177	.02017	1.1914	.04460	2.9983	.00780	-.01692	.00855
Stddev	.00177	.0044	.00099	.00361	.00003	.00044	.0009	.00044	.0217	.00038	.00558	.00063
%RSD	1.7063	.12512	6.6129	1.6067	.24900	2.1769	.07358	.97870	.72523	4.9309	32.948	7.4074
#1	.10246	3.5122	.01570	.22738	.01175	.02048	1.1908	.04491	3.0136	.00808	-.01298	.00899
#2	.10496	3.5184	.01430	.22227	.01179	.01986	1.1920	.04429	2.9829	.00753	-.02086	.00810

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.01150	.51569	1.1036	.10273	.01029	.01568	.00992	.01845	F .03282	.01129	F .02729	F .00849
Stddev	.00017	.02599	.0556	.00096	.00005	.00188	.00001	.00003	.02176	.00094	.00025	.00095
%RSD	1.4893	5.0395	5.0395	.93142	.50566	11.961	.11890	.18734	66.325	8.3143	.90970	11.143
#1	.01162	.49732	1.0643	.10341	.01032	.01435	.00991	.01847	.01743	.01063	.02746	.00782
#2	.01138	.53407	1.1429	.10206	.01025	.01700	.00993	.01842	.04820	.01196	.02711	.00916

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000	Chk Pass	Chk Fail .02000	Chk Fail .01500
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2844.2	46395.	5522.8									
Stddev	.3	196.	2.7									
%RSD	.01056	.42352	.04905									
#1	2844.0	46256.	5520.9									
#2	2844.4	46534.	5524.7									
									-30.000%		30.000%	-30.000%

Sample Name: LB 280-279190/1-C Acquired: 6/1/2015 18:52:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 6/1 Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00098	.00210	-.00656	.00804	.00169	-.00004	.00345	.11642	-.00030
#2	.00047	.00260	-.00042	.00861	.00099	-.00020	.00089	.12117	-.00023
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.10000	Chk Pass						
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00092	.00028	.00278	.01349	.39605	.00372	.00717	.00045	.00015
#2	-.00081	.00019	.00291	.01517	.38855	.00302	.01128	.00027	-.00035
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	326.94	.00043	-.00541	-.00131	-.01537	-.00419	-.00571	.02363	.05057
#2	324.83	-.00035	-.00359	-.00051	-.01272	-.00473	-.00264	.03389	.07252
Check ? High Limit Low Limit	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00162	.00043	-.00057	-.00031	.00422	-.06589	-.00017	.00133	-.00724
#2	-.00175	.00039	.00111	-.00010	.00299	.01817	-.00041	.00067	-.00376
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2749.4	44516.	5537.4						
#2	2742.6	44697.	5532.2						

Sample Name: LCS 280-279190/2-C Acquired: 6/1/2015 18:55:18 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .21790	As1890 ppm F .43344	B_2089 ppm .79415	Ba4554 ppm .20053	Be3130 ppm 2.2636	Bi2230 ppm .00948	Ca3179 ppm .37987	Cd2288 ppm 9.5232
#1	.21720	.43456	.79885	.20055	2.2640	.00949	.37791	9.5209	.22569
#2	.21859	.43232	.78946	.20052	2.2632	.00947	.38182	9.5254	.22810
Check ? High Limit Low Limit	Chk Pass Chk Fail .43200 .34400	Chk Pass Chk Pass Chk Pass	Chk Pass None	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass			
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .10072	Cu3247 ppm F .82724	Fe2599 ppm .43597	K_7664 ppm .19323	Li6707 ppm 10.836	Mg2790 ppm 20775	Mn2576 ppm 9.7754	Mo2020 ppm .10675
#1	.10011	.82966	.43364	.19375	10.821	.20898	9.7805	.10662	.20619
#2	.10133	.82482	.43831	.19270	10.851	.20652	9.7702	.10688	.20844
Check ? High Limit Low Limit	Chk Pass Chk Fail .25200 .16800	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm F 305.86	P_1782 ppm .10260	Pb2203 ppm 2.0906	S_1820 ppm 1.0731	Sb2068 ppm .36853	Se1960 ppm .10176	Si2881 ppm .57148	SiO2 ppm 2.0194
#1	305.81	.10157	2.0696	1.0649	.36604	.10085	.57100	2.0108	4.3031
#2	305.91	.10362	2.1117	1.0814	.37102	.10267	.57195	2.0280	4.3400
Check ? High Limit Low Limit	Chk Fail 11.200 9.1000	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	None	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Fail 4.9220 4.0200
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .39431	Th2837 ppm .18890	Ti3349 ppm .20629	Tl1908 ppm .20996	U_3701 ppm .37136	V_2924 ppm .38913	Zn2062 ppm .10848	Zr3391 ppm .58042
#1	.39106	.18893	.20606	.20985	.36887	.39001	.10859	.58005	.08652
#2	.39756	.18887	.20653	.21008	.37384	.38825	.10837	.58079	.08138
Check ? High Limit Low Limit	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass	Chk Pass Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2720.7	Y_3774 Cts/S 44601.	360.073 {94}	377.433 {89}			Zn2062 ppm .58042	Zr3391 ppm .08395
#1	2727.2	44533.	5594.4						
#2	2714.3	44670.	5513.3						

Sample Name: 280-69401-A-1-B Acquired: 6/1/2015 18:57:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00067	.19049	-.00289	.10885	.02614	.00005	.00289	12.452	-.00019
#2	.00035	.19206	-.00016	.10895	.02567	.00009	.00233	12.701	-.00056
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00028	.00125	.00177	.20271	.94703	.00965	.94930	.02842	.02191
#2	.00022	.00125	.00160	.20259	.96260	.00672	.98029	.02880	.02254
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	271.59	.00245	.19454	-.00066	1.0215	-.00132	-.00088	1.4512	3.1056
#2	277.82	.00218	.19054	-.00059	1.0262	-.00241	-.00729	1.4638	3.1326
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	-.00049	.07452	-.00152	-.00123	-.00150	.00501	.00038	1.4712	-.00717
#2	-.00082	.07533	-.00107	-.00041	-.00096	.01095	-.00054	1.5099	-.00516
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2706.4	44075.	5413.8						
#2	2705.6	44163.	5321.1						

Sample Name: 280-69401-A-2-B Acquired: 6/1/2015 19:00:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00095	As1890 ppm .01858	B_2089 ppm .00527	Ba4554 ppm .06033	Be3130 ppm .04594	Bi2230 ppm -.00001	Ca3179 ppm .00297	Cd2288 ppm 22.570
#1	.00052	.01811	.00565	.06001	.04577	.00002	.00068	22.741	.00009
#2	.00138	.01904	.00490	.06064	.04612	-.00004	.00526	22.399	.00002
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00028	Cu3247 ppm .00053	Fe2599 ppm .00350	K_7664 ppm .06665	Li6707 ppm 8.3012	Mg2790 ppm .00664	Mn2576 ppm 5.2541	Mo2020 ppm .06012
#1	.00034	.00053	.00333	.06609	8.3191	.00750	5.2007	.05934	.00008
#2	.00022	.00053	.00367	.06720	8.2834	.00578	5.3074	.06090	-.00018
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 342.20	P_1782 ppm .00624	Pb2203 ppm .01121	S_1820 ppm .00675	Sb2068 ppm 6.3822	Se1960 ppm -.00427	Si2881 ppm -.00027	SiO2 ppm 4.0382
#1	343.82	.00609	.01034	.00630	6.3745	-.00428	.00621	4.0675	8.7045
#2	340.58	.00638	.01207	.00720	6.3899	-.00426	-.00675	4.0089	8.5790
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00059	Th2837 ppm .20156	Ti3349 ppm .00114	Tl1908 ppm -.00071	U_3701 ppm -.00184	V_2924 ppm -.02534	Zn2062 ppm -.00015	Zr3391 ppm .03252
#1	-.00001	.20283	.00041	-.00055	-.00221	-.02250	.00004	.03283	-.00371
#2	-.00118	.20030	.00187	-.00087	-.00146	-.02817	-.00035	.03221	-.00596
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2682.8	Y_3774 Cts/S 43966.	377.433 {89}	377.433 {89}	377.433 {89}	377.433 {89}	377.433 {89}	377.433 {89}
#1	2695.0	43867.	5285.6						
#2	2670.5	44066.	5352.5						

Sample Name: 280-69547-A-1-E Acquired: 6/1/2015 19:03:20 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.00376	-.00151	.01833	.35473	-.00017	.00337	138.78	.00021
Stddev	.00038	.00063	.00755	.00002	.00166	.00006	.00047	.57	.00002
%RSD	57.291	16.670	499.76	.08741	.46715	33.426	13.828	.41307	8.7227
#1	.00094	.00420	-.00685	.01832	.35590	-.00022	.00370	139.19	.00020
#2	.00040	.00331	.00383	.01834	.35356	-.00013	.00304	138.38	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	.00099	.00177	.00298	1.2962	.00858	5.7032	.96526	-.00290
Stddev	.00025	.00027	.00016	.00157	.0317	.00090	.0298	.00018	.00061
%RSD	20.672	26.879	8.9145	52.741	2.4487	10.539	.52186	.01855	21.191
#1	.00103	.00118	.00165	.00187	1.2737	.00794	5.6821	.96538	-.00333
#2	.00138	.00080	.00188	.00409	1.3186	.00922	5.7242	.96513	-.00247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	282.16	.00753	-.00282	.01623	.39806	.00106	.00088	.94066	2.0130
Stddev	1.40	.00028	.00158	.00067	.00559	.00350	.00314	.01947	.0417
%RSD	.49779	3.6612	55.965	4.1302	1.4040	328.94	355.71	2.0701	2.0701
#1	283.15	.00733	-.00394	.01575	.40201	.00354	-.00134	.95443	2.0425
#2	281.17	.00772	-.00170	.01670	.39410	-.00141	.00311	.92689	1.9835
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00081	.39446	-.00075	-.00071	-.00948	-.01916	.00001	.00572	-.00530
Stddev	.00076	.00203	.00133	.00096	.00346	.01794	.00011	.00089	.00346
%RSD	93.978	.51580	176.81	135.68	36.545	93.629	1257.8	15.502	65.339
#1	-.00027	.39590	-.00169	-.00139	-.00703	-.00647	.00008	.00634	-.00285
#2	-.00135	.39302	.00019	-.00003	-.01193	-.03184	-.00007	.00509	-.00774
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2666.7	43337.	5323.9						
Stddev	3.1	67.	23.4						
%RSD	.11736	.15491	.43971						
#1	2668.9	43289.	5307.3						
#2	2664.5	43384.	5340.4						

Sample Name: 280-69547-A-1-E SD@5 Acquired: 6/1/2015 19:06:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00089	.00067	.01014	.00365	.07299	.00003	.00212	27.992	-.00021
#2	-.00041	.00072	-.00080	.00373	.07190	-.00011	.00191	27.631	-.00071
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00070	.00072	.00118	.01017	.56179	.00547	1.2098	.19796	-.00135
#2	.00014	.00047	.00075	.00395	.53178	.00519	1.2116	.19729	-.00194
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	56.817	.00373	-.00641	.00215	.05699	.00051	-.01386	.21510	.46032
#2	57.512	.00296	-.00732	.00104	.05844	-.00175	-.00959	.19767	.42302
Check ? High Limit Low Limit	Chk Pass	Chk Fail 50.000 -.01000	Chk Pass	Chk Pass					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00466	.08199	.00132	-.00143	-.00437	-.01795	-.00110	.00105	-.00592
#2	.00373	.08208	-.00089	-.00136	-.00013	-.04515	-.00024	-.00042	-.00676
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2723.8	44304.	5296.2						
#2	2738.5	44277.	5399.6						

Sample Name: 280-69547-A-1-F MS Acquired: 6/1/2015 19:08:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .20370	As1890 ppm .40416	B_2089 ppm .73346	Ba4554 ppm 2.4651	Be3130 ppm .00866	Bi2230 ppm .34497	Ca3179 ppm 142.30	Cd2288 ppm .21160
#1	.20301	.40472	.73721	.19762	2.4842	.00865	.34793	143.51	.21284
#2	.20439	.40360	.72971	.19448	2.4460	.00866	.34200	141.08	.21035
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .09394	Cu3247 ppm W .74437	Fe2599 ppm .40415	K_7664 ppm 11.001	Li6707 ppm .19788	Mg2790 ppm 14.419	Mn2576 ppm 1.0260	Mo2020 ppm .18926
#1	.09484	.74329	.40562	.18483	11.040	.19784	14.483	1.0244	.19076
#2	.09303	.74546	.40268	.17810	10.963	.19791	14.354	1.0276	.18775
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 281.68	P_1782 ppm .09960	Pb2203 ppm 1.9598	S_1820 ppm 1.0035	Sb2068 ppm .73357	Se1960 ppm .09602	Si2881 ppm .53349	SiO2 ppm 2.7555
#1	283.96	.10009	1.9777	1.0139	.73623	.09836	.54226	2.7525	5.8903
#2	279.41	.09910	1.9420	.99308	.73091	.09367	.52473	2.7585	5.9032
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .36361	Th2837 ppm .55547	Ti3349 ppm .19392	Tl1908 ppm .19577	U_3701 ppm .33239	V_2924 ppm .34185	Zn2062 ppm .10075	Zr3391 ppm .53926
#1	.36726	.55982	.19665	.19569	.33609	.32305	.10044	.53359	.07958
#2	.35997	.55112	.19118	.19584	.32870	.36065	.10106	.54493	.07857
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2643.1	Y_3774 Cts/S 8.3	377.433 {89} 5327.8					
#1	2637.3	43701.	5281.6						
#2	2648.9	43420.	5374.0						

Sample Name: 280-69547-A-1-G MSD Acquired: 6/1/2015 19:11:16 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm W .22402 .00004 .01667	As1890 ppm .43927 .00241 .54918	B_2089 ppm .80929 .00261 .32212	Ba4554 ppm 2.7248 .0197 .72331	Be3130 ppm .00975 .00023 2.3825	Bi2230 ppm F .38588 .00270 .70025	Ca3179 ppm 157.15 1.05 .66670	Cd2288 ppm .23347 .00164 .70443
#1	.22399	.44098	.81114	.21726	2.7109	.00992	.38397	156.41	.23230
#2	.22404	.43756	.80745	.21733	2.7388	.00959	.38779	157.89	.23463
Check ? High Limit Low Limit	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .10000 -.10000	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Co2286 228.616 {447}	Cr2055 ppm W .81420 .00923	Cu3247 ppm .44090 .00183	Fe2599 ppm .19802 .00246	K_7664 ppm 11.994 .075	Li6707 ppm .21390 .00125	Mg2790 ppm 15.722 .016	Mn2576 ppm 1.1237 .00000	Mo2020 ppm .20952 .00100
#1	.10323	.80767	.44219	.19976	11.941	.21302	15.733	1.1237	.20881
#2	.10413	.82073	.43961	.19629	12.047	.21479	15.711	1.1238	.21023
Check ? High Limit Low Limit	Chk Pass	Chk Warn .10000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Na8183 818.326 {41}	Ni2316 ppm 311.23 .1.78 .57173	P_1782 ppm .10918 .00028 .25396	Pb2203 ppm W 2.1612 .0087 .40222	S_1820 ppm .81713 .00559 .37564	Sb2068 ppm .10778 .00025 .68445	Se1960 ppm .58677 .00495 .23297	Si2881 ppm 3.0444 .0381 .84369	SiO2 ppm 6.5151 .0815 1.2505
#1	309.97	.10898	2.1551	1.1020	.81318	.10760	.58327	3.0175	6.4574
#2	312.49	.10937	2.1674	1.1079	.82109	.10796	.59027	3.0713	6.5727
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev 	Sn1899 189.989 {477}	Sr4077 ppm .39958 .00262 .65463	Th2837 ppm .61452 .00483 .78659	Ti3349 ppm .21302 .00154 .72138	Tl1908 ppm .21461 .00083 .38668	U_3701 ppm .36148 .00439 .1.2157	V_2924 ppm .40442 .07283 18.009	Zn2062 ppm .11021 .00014 .13051	Zr3391 ppm .59164 .00343 .57900
#1	.39773	.61110	.21194	.21402	.35837	.45592	.11031	.59406	.08496
#2	.40143	.61793	.21411	.21519	.36459	.35292	.11011	.58922	.08625
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2645.5 32.1 1.2123	Y_3774 Cts/S 43003. 166. .38649	377.433 {89}					
#1	2622.8	42885.	5284.0						
#2	2668.2	43120.	5237.4						

Sample Name: 280-69547-A-1-E PDS Acquired: 6/1/2015 19:13:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04806	1.0531	.19638	.11455	.44665	.04798	.00628	155.99	.05151
Stddev	.00021	.0029	.00160	.00069	.01038	.00095	.00273	3.68	.00034
%RSD	.43991	.27238	.81415	.59937	2.3238	1.9864	43.368	2.3606	.65104
#1	.04791	1.0551	.19751	.11406	.43931	.04731	.00436	153.39	.05127
#2	.04821	1.0511	.19525	.11503	.45399	.04866	.00821	158.59	.05174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05078	.03990	.04917	1.3491	21.709	.10995	24.805	1.0068	.04611
Stddev	.00079	.00015	.00020	.0179	.650	.00124	.064	.0009	.00077
%RSD	1.5512	.36525	.40968	1.3260	2.9944	1.1297	.25832	.08851	1.6681
#1	.05023	.03980	.04903	1.3365	21.249	.10907	24.760	1.0074	.04557
#2	.05134	.04000	.04931	1.3618	22.168	.11082	24.851	1.0062	.04666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	301.28	.05624	W 2.1154	.10864	.39331	.09755	.18827	5.9317	12.694
Stddev	7.65	.00001	.0126	.00075	.00601	.00420	.00090	.0676	.145
%RSD	2.5399	.02190	.59560	.69238	1.5284	4.3022	.47782	1.1389	1.1389
#1	295.87	.05625	2.1065	.10917	.38906	.09458	.18764	5.8839	12.592
#2	306.69	.05624	2.1243	.10810	.39756	.10051	.18891	5.9794	12.796
Check ?	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09778	.43958	.20836	.05137	.17126	.50859	.05488	.24638	.03603
Stddev	.00285	.01050	.00021	.00022	.00021	.03439	.00045	.00062	.00487
%RSD	2.9181	2.3896	.09884	.42796	.12328	6.7620	.82547	.25033	13.508
#1	.09576	.43215	.20851	.05121	.17141	.48427	.05456	.24682	.03259
#2	.09980	.44701	.20822	.05152	.17111	.53290	.05520	.24595	.03948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2655.0	43580.	5344.7						
Stddev	5.2	76.	100.9						
%RSD	.19588	.17333	1.8875						
#1	2658.7	43633.	5416.0						
#2	2651.3	43526.	5273.4						

Sample Name: 280-69740-A-1-B Acquired: 6/1/2015 19:16:31 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279558 6010B TCLP Q3

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00037	As1890 ppm .02189	B_2089 ppm .00098	Ba4554 ppm .07297	Be3130 ppm .11326	Bi2230 ppm -.00007	Ca3179 ppm .00251	Cd2288 ppm 43.760
#1	.00026	.02153	-.00247	.07183	.11376	-.00011	.00362	44.130	-.00027
#2	.00047	.02225	.00051	.07412	.11276	-.00003	.00140	43.391	-.00035
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00004	Cu3247 ppm .00130	Fe2599 ppm .00346	K_7664 ppm .03442	Li6707 ppm 1.6231	Mg2790 ppm .00565	Mn2576 ppm 6.1906	Mo2020 ppm .43073
#1	-.00009	.00136	.00348	.03315	1.6106	.00348	6.1731	.43074	-.00222
#2	.00017	.00125	.00345	.03570	1.6355	.00782	6.2081	.43072	-.00178
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm 313.02	P_1782 ppm .01168	Pb2203 ppm .02096	S_1820 ppm .00930	Sb2068 ppm 1.4432	Se1960 ppm -.00053	Si2881 ppm -.00342	SiO2 ppm 1.9856
#1	315.35	.01129	.02180	.01107	1.4343	-.00243	-.00093	1.9752	4.2269
#2	310.70	.01208	.02012	.00752	1.4521	.00137	-.00592	1.9960	4.2714
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm -.00071	Th2837 ppm .29059	Ti3349 ppm .00126	Tl1908 ppm .00265	U_3701 ppm -.00344	V_2924 ppm -.03894	Zn2062 ppm .00695	Zr3391 ppm .01232
#1	-.00122	.29341	-.00182	.00240	-.00060	-.03232	.00729	.01195	-.00354
#2	-.00020	.28777	-.00071	.00290	-.00629	-.04556	.00661	.01269	-.00717
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2643.3	Y_3774 Cts/S 43344.	360.073 {94}	377.433 {89}	5310.4	5310.4	Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	2649.8	43250.	5257.8						
#2	2636.7	43437.	5363.0						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 19:19:11 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00496	51.482	-00044	.00005	.00119	.00009	.97026	.02939	-.00045	-.00033	.00085
Stddev	.00021	.008	.00155	.00061	.00022	.00008	.00976	.00018	.00022	.00024	.00038
%RSD	4.3053	.01584	355.74	1257.2	18.050	91.478	1.0058	.62443	49.002	74.099	44.002
#1	.00511	51.477	.00066	-.00038	.00104	.00003	.97717	.02952	-.00061	-.00015	.00059
#2	.00481	51.488	-.00153	.00048	.00134	.00015	.96336	.02926	-.00030	-.00050	.00112
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00208	49.335	.42799	.00398	.06084	.00135	-.00077	254.37	.00306	-.00029	-.00140
Stddev	.00072	.077	.01537	.00165	.00216	.00006	.00010	.34	.00051	.00023	.00053
%RSD	34.636	.15533	3.5901	41.418	3.5554	4.4357	13.571	.13321	16.734	78.588	38.257
#1	-.00157	49.281	.43886	.00514	.05931	-.00139	-.00085	254.61	.00342	-.00013	-.00102
#2	-.00259	49.389	.41713	.00281	.06237	-.00131	-.00070	254.13	.00270	-.00045	-.00177
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	W 4.6448	-.01057	.00383	-.00912	-.01951	-.00339	.00061	5.2466	-.01234	.00538	W 10.530
Stddev	.0325	.00011	.00294	.00426	.00911	.00193	.00021	.0012	.00020	.00397	.234
%RSD	.69984	.99458	76.812	46.670	46.670	57.026	33.518	.02327	1.6204	73.769	2.2202
#1	4.6678	-.01050	.00175	-.00611	-.01307	-.00476	.00076	5.2457	-.01248	.00257	10.695
#2	4.6219	-.01065	.00591	-.01213	-.02595	-.00202	.00047	5.2475	-.01220	.00818	10.364
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn 10.000 5.0000%
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00166	-.00089	-.15903								
Stddev	.00101	.00019	.00345								
%RSD	60.666	21.188	2.1686								
#1	.00237	-.00103	-.16146								
#2	.00095	-.00076	-.15659								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2708.1	43728.	5239.7								
Stddev	15.9	39.	16.2								
%RSD	.58579	.08927	.31005								
#1	2696.9	43756.	5228.3								
#2	2719.4	43701.	5251.2								

Sample Name: CCV-3296664 Acquired: 6/1/2015 19:21:47 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52885	F .57146	.99176	.49355	.48795	.48615	.00325	5.0267	.50975	.52472	F .41739
Stddev	.00190	.00447	.00300	.00166	.00310	.00288	.00221	.0279	.00200	.00155	.00149
%RSD	.36021	.78298	.30286	.33553	.63550	.59217	68.144	.55531	.39236	.29530	.35698
#1	.53019	.57462	.99388	.49472	.48576	.48411	.00482	5.0069	.51116	.52582	.41634
#2	.52750	.56829	.98963	.49238	.49014	.48818	.00168	5.0464	.50833	.52363	.41845
Check ?	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 -10.490%
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49270	2.4588	51.725	1.0246	20.932	W .55167	.50524	5.4507	.52524	1.0154	.99091
Stddev	.00013	.0246	.189	.0049	.003	.00108	.00181	.0365	.00308	.0039	.00426
%RSD	.02728	1.0001	.36623	.47521	.01259	.19640	.35886	.66959	.58570	.38389	.42978
#1	.49260	2.4414	51.591	1.0212	20.930	.55244	.50653	5.4249	.52741	1.0181	.99392
#2	.49279	2.4762	51.859	1.0281	20.934	.55091	.50396	5.4765	.52306	1.0126	.98789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn .50000 10.000%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01627	.95009	.93463	5.0777	10.866	1.0127	.49005	-.00272	.53650	.98591	-.01944
Stddev	.00365	.00351	.00843	.0064	.014	.0052	.00209	.00134	.00089	.00352	.00762
%RSD	22.436	.36905	.90233	.12637	.12637	.51499	.42709	49.328	.16515	.35735	39.210
#1	-.01369	.95257	.94060	5.0822	10.876	1.0164	.48857	-.00367	.53713	.98840	-.01405
#2	-.01885	.94761	.92867	5.0731	10.856	1.0090	.49153	-.00177	.53587	.98342	-.02483
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	W .55145	F .60009	.48238								
Stddev	.00141	.00262	.00135								
%RSD	.25497	.43684	.27899								
#1	.55244	.60194	.48143								
#2	.55045	.59824	.48333								
Check ?	Chk Warn .50000 10.000%	Chk Fail .50000 10.490%	Chk Pass								
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2743.6	44281.	5288.1								
Stddev	11.7	200.	2.2								
%RSD	.42590	.45241	.04146								
#1	2735.4	44139.	5286.5								
#2	2751.9	44423.	5289.6								

Sample Name: CCB Acquired: 6/1/2015 19:24:17 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .00102	-0.00010	-0.00173	.00019	.00041	-0.00005	.00368	.00462	-0.00056	.00014	.00025
Stddev	.00014	.00010	.00337	.00093	.00004	.00007	.00086	.00094	.00008	.00016	.00027
%RSD	13.889	100.47	194.52	480.40	10.979	136.49	23.429	20.253	14.012	112.54	110.60
#1	.00112	-.00003	-.00412	-.00046	.00038	-.00010	.00307	.00528	-.00050	.00026	.00005
#2	.00092	-.00017	.00065	.00085	.00044	.00000	.00429	.00396	-.00061	.00003	.00044
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00100										
Low Limit	-.00100										
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00106	.36454	.00448	.00292	.00015	.00019	.19621	-.00029	-.00310	F -.00305
Stddev	.00007	.00201	.02028	.00198	.00214	.00002	.00061	.00432	.00019	.00258	.00111
%RSD	33.274	189.88	5.5642	44.249	73.329	12.075	317.13	2.2024	65.354	82.974	36.464
#1	.00016	.00248	.35020	.00588	.00444	.00017	.00062	.19927	-.00043	-.00128	-.00384
#2	.00026	-.00036	.37888	.00308	.00141	.00014	-.00024	.19316	-.00016	-.00493	-.00227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	
High Limit										.00300	
Low Limit										-.00300	
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02434	-.00088	F -.00706	.02303	.04929	-.00132	.00018	-.00229	-.00044	.00429	.00974
Stddev	.00440	.00108	.00147	.02213	.04736	.00021	.00014	.00122	.00068	.00394	.00401
%RSD	18.079	123.53	20.772	96.087	96.087	15.860	78.349	53.254	155.93	91.887	41.182
#1	-.02123	-.00011	-.00602	.03868	.08278	-.00117	.00008	-.00142	-.00092	.00708	.00690
#2	-.02745	-.00164	-.00809	.00738	.01580	-.00147	.00028	-.00315	.00004	.00150	.01257
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00075	-.00007	-.00598								
Stddev	.00035	.00024	.00179								
%RSD	46.401	361.87	29.933								
#1	-.00050	-.00024	-.00471								
#2	-.00099	.00010	-.00724								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2759.4	44533.	5284.2								
Stddev	11.0	214.	45.1								
%RSD	.39887	.48123	.85430								
#1	2751.6	44382.	5252.3								
#2	2767.2	44685.	5316.1								

Sample Name: CCVL3301032II Acquired: 6/1/2015 19:26:39 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01111	.11777	.01114	.09983	.01058	.00089	.10396	.21528	.00509	.01152	.00887	.01511
Stddev	.00021	.00003	.00150	.00194	.00006	.00001	.00039	.00291	.00006	.00004	.00011	.00082
%RSD	1.8530	.02644	13.470	1.9419	.61317	.60466	.37832	1.3505	1.2332	.34515	1.2420	5.4371
#1	.01096	.11779	.01220	.10120	.01053	.00090	.10368	.21734	.00513	.01155	.00879	.01569
#2	.01125	.11775	.01008	.09846	.01062	.00089	.10424	.21323	.00504	.01149	.00895	.01453

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.10139	3.4861	F.01601	.22537	.01177	.01957	1.2487	.04414	2.9777	.00712	-.02098	.00911
Stddev	.00123	.0320	.00018	.00079	.00010	.00055	.0242	.00012	.0143	.00071	.00443	.00274
%RSD	1.2152	.91873	1.1233	.35174	.87360	2.7953	1.9359	.26821	.48029	9.9819	21.107	30.105
#1	.10226	3.4635	.01589	.22593	.01184	.01996	1.2316	.04406	2.9878	.00762	-.01785	.00717
#2	.10052	3.5088	.01614	.22481	.01169	.01919	1.2658	.04422	2.9676	.00662	-.02411	.01105

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00911	.52744	1.1287	.10047	.01029	.01434	.00992	.01672	F.02868	.01123	.02570	F.00583
Stddev	.00197	.00994	.0213	.00035	.00000	.00406	.00017	.00096	.02243	.00031	.00035	.00020
%RSD	21.634	1.8843	1.8843	.34473	.04593	28.329	1.7104	5.7226	78.210	2.7206	1.3812	3.4219
#1	.00771	.53447	1.1438	.10071	.01030	.01722	.00980	.01739	.04455	.01144	.02544	.00597
#2	.01050	.52041	1.1137	.10022	.01029	.01147	.01004	.01604	.01282	.01101	.02595	.00569

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Fail .01500
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S						-30.000%			-30.000%
Avg	2782.9	45320.	5335.4									
Stddev	1.5	86.	76.4									
%RSD	.05544	.18953	1.4321									

#1	2784.0	45259.	5389.5
#2	2781.8	45381.	5281.4

Sample Name: MB 280-279424/1-A Acquired: 6/1/2015 19:29:20 Type: Unk
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: 5/29 Custom ID2: Custom ID3:
 Comment: 279424 200.7 FG (B Ca Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00362	.00114	.00054	.00090	-0.00007	.00260	.01857	-0.00021
Stddev	.00057	.00056	.00254	.00072	.00013	.00007	.00330	.00755	.00023
%RSD	155.88	15.350	223.35	134.30	14.584	90.732	126.91	40.625	112.11
#1	-.00004	.00401	-.00066	.00105	.00080	-.00003	.00027	.01324	-.00004
#2	.00077	.00323	.00293	.00003	.00099	-.00012	.00493	.02391	-.00037
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.00038	.00017	.00701	.35186	.00365	.00547	.00056	-.00019
Stddev	.00020	.00001	.00005	.00059	.00749	.00137	.00497	.00003	.00021
%RSD	91.827	3.2301	27.460	8.4721	2.1284	37.435	90.755	5.6115	113.30
#1	.00008	.00037	.00020	.00743	.35715	.00462	.00196	.00054	-.00004
#2	.00036	.00039	.00014	.00659	.34656	.00268	.00899	.00059	-.00034
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15221	.00045	-.00585	-.00010	-.02052	-.00282	-.00523	.01891	.04047
Stddev	.00561	.00007	.00045	.00061	.00037	.00131	.00036	.02296	.04914
%RSD	3.6885	16.332	7.6408	628.75	1.8020	46.366	6.9041	121.44	121.44
#1	.14824	.00040	-.00553	.00034	-.02078	-.00189	-.00548	.00267	.00572
#2	.15618	.00050	-.00616	-.00053	-.02026	-.00374	-.00497	.03515	.07522
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	None
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00157	.00027	.00131	-.00062	-.00124	-.02189	-.00033	.00260	-.00509
Stddev	.00012	.00011	.00007	.00026	.00020	.01199	.00024	.00070	.00075
%RSD	7.9143	40.824	5.0214	41.607	16.054	54.770	73.942	26.770	14.751
#1	-.00165	.00035	.00136	-.00081	-.00110	-.03037	-.00050	.00309	-.00562
#2	-.00148	.00019	.00127	-.00044	-.00138	-.01341	-.00016	.00211	-.00456
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2819.4	45873.	5463.4						
Stddev	5.1	291.	40.1						
%RSD	.17972	.63400	.73441						
#1	2815.8	46079.	5491.7						
#2	2823.0	45668.	5435.0						

Sample Name: LCS 280-279424/2-A Acquired: 6/1/2015 19:31:41 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca Na)

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm 2.1556	As1890 ppm .98790	B_2089 ppm .98988	Ba4554 ppm 1.9093	Be3130 ppm .04770	Bi2230 ppm 1.8893	Ca3179 ppm 47.547	Cd2288 ppm .10035
#1	.05390	2.1544	.99016	.99115	1.9082	.04742	1.8926	47.507	.10032
#2	.05313	2.1567	.98564	.98862	1.9104	.04799	1.8861	47.587	.10037
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm F .16314	Cu3247 ppm .24267	Fe2599 ppm .95914	K_7664 ppm 51.112	Li6707 ppm 1.0032	Mg2790 ppm 51.171	Mn2576 ppm .54001	Mo2020 ppm 1.0405
#1	.50663	.16364	.24379	.95602	51.045	1.0041	51.288	.54042	1.0397
#2	.50400	.16264	.24155	.96225	51.178	1.0023	51.055	.53960	1.0413
Check ? High Limit Low Limit	Chk Pass	Chk Fail .05750 .04275	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na8183 818.326 {41}	Ni2316 ppm .50558	P_1782 ppm 10.420	Pb2203 ppm .49347	S_1820 ppm 1.8621	Sb2068 ppm 4.9035	Se1960 ppm 1.9340	Si2881 ppm 10.027	SiO2 ppm 21.458
#1	51.556	.50569	10.406	.49525	1.8745	.49270	1.9291	10.016	21.434
#2	51.661	.50548	10.434	.49170	1.8496	.48801	1.9389	10.038	21.482
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .95901	Th2837 ppm 1.0485	Ti3349 ppm 1.0448	Tl1908 ppm 1.9675	U_3701 ppm 2.0599	V_2924 ppm .54032	Zn2062 ppm F .56941	Zr3391 ppm .44603
#1	2.0333	.95791	1.0537	1.0445	1.9611	2.0397	.54021	.57041	.44445
#2	2.0389	.96012	1.0432	1.0452	1.9740	2.0801	.54043	.56841	.44762
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .55500 .42500	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 44433.	Y_3774 Cts/S 5402.5	377.433 {89}					
#1	2728.5	44414.	5402.8						
#2	2730.7	44452.	5402.2						

Sample Name: 280-69708-E-1-A @50 Acquired: 6/1/2015 19:34:06 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca) 50x

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00702	.00145	2.9202	.00169	-0.00007	.00109	16.299	-0.00017
Stddev	.00006	.00027	.00248	.0394	.00007	.00006	.00192	.232	.00018
%RSD	62.562	3.9158	171.12	1.3508	4.0824	85.409	176.54	1.4213	109.16
#1	.00005	.00682	.00321	2.9481	.00173	-.00012	-.00027	16.463	-.00030
#2	.00013	.00721	-.00030	2.8923	.00164	-.00003	.00244	16.136	-.00004
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	.00023	.00085	.00594	.76252	.00744	22.097	.08103	.00032
Stddev	.00035	.00014	.00064	.00046	.05784	.00219	.087	.00038	.00057
%RSD	43.684	61.010	75.380	7.6890	7.5848	29.374	.39189	.46899	178.58
#1	.00055	.00013	.00040	.00561	.72163	.00590	22.159	.08130	-.00008
#2	.00104	.00032	.00130	.00626	.80342	.00899	22.036	.08076	.00072
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.83994	.00825	-.00938	.00042	21.188	-.00030	.02433	.57274	1.2257
Stddev	.02675	.00023	.00245	.00109	.135	.00113	.00878	.00756	.0162
%RSD	3.1850	2.8075	26.074	260.89	.63906	373.48	36.080	1.3194	1.3194
#1	.82103	.00808	-.00765	.00119	21.284	.00050	.03053	.56739	1.2142
#2	.85886	.00841	-.01111	-.00035	21.092	-.00110	.01812	.57808	1.2371
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00641	.05067	-.00185	-.00062	-.00160	-.02656	-.00083	.00426	-.00376
Stddev	.00069	.00002	.00293	.00032	.00027	.04197	.00025	.00024	.00147
%RSD	10.754	.04220	158.95	52.081	16.820	158.02	30.130	5.5359	39.036
#1	.00592	.05066	-.00392	-.00039	-.00179	.00312	-.00101	.00443	-.00272
#2	.00690	.05069	.00023	-.00084	-.00141	-.05624	-.00065	.00409	-.00480
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	2790.5	45203.	5408.5						
Stddev	8.8	60.	110.4						
%RSD	.31638	.13354	2.0409						
#1	2796.7	45160.	5330.4						
#2	2784.2	45246.	5486.5						

Sample Name: 69708-E-1-A SD@250 Acquired: 6/1/2015 19:36:43 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca) 50x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	.00138	-.00214	.45594	.00045	-.00009	.00047	2.6511	-.00007
Stddev	.00030	.00025	.00317	.00077	.00006	.00018	.00104	.0726	.00014
%RSD	26.810	18.177	148.49	.16955	12.245	207.24	220.24	2.7393	187.51
#1	.00091	.00120	-.00438	.45649	.00049	.00004	-.00026	2.5998	-.00017
#2	.00133	.00156	.00011	.45539	.00041	-.00021	.00121	2.7025	.00002
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.00022	.00111	.08613	.43482	.00551	3.5184	.01444	.00003
Stddev	.00028	.00019	.00005	.00114	.01426	.00018	.0088	.00010	.00022
%RSD	142.00	85.299	4.9522	1.3290	3.2787	3.2354	.25085	.72472	728.85
#1	.00039	.00009	.00107	.08532	.42473	.00564	3.5247	.01452	.00019
#2	.00000	.00036	.00115	.08694	.44490	.00538	3.5122	.01437	-.00013
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23034	.00140	-.00895	-.00114	3.2430	-.00157	-.00097	.12593	.26950
Stddev	.00155	.00050	.00083	.00067	.0091	.00132	.00043	.02333	.04992
%RSD	.67150	35.493	9.2248	58.399	.27900	84.041	44.027	18.524	18.524
#1	.22925	.00175	-.00836	-.00067	3.2494	-.00064	-.00067	.10944	.23420
#2	.23144	.00105	-.00953	-.00161	3.2366	-.00250	-.00127	.14243	.30480
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00578	.00837	.00003	-.00140	.00192	-.03887	-.00080	.00703	-.00552
Stddev	.00123	.00014	.00128	.00043	.00128	.00372	.00074	.00097	.00108
%RSD	21.356	1.6397	5126.6	31.049	66.443	9.5648	92.296	13.727	19.630
#1	.00665	.00827	-.00088	-.00170	.00283	-.03624	-.00132	.00635	-.00476
#2	.00491	.00846	.00093	-.00109	.00102	-.04150	-.00028	.00772	-.00629
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2845.1	46446.	5465.7						
Stddev	6.0	139.	139.8						
%RSD	.20930	.29862	2.5579						
#1	2849.3	46348.	5564.6						
#2	2840.8	46544.	5366.9						

Sample Name: 69708-E-1-B MS @50 Acquired: 6/1/2015 19:39:23 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca) 50x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	.00126	.05614	.01834	.30244	.04378	.00110	.04370	18.002	.00217
#1	.00114	.05673	.01909	3.0190	.04419	.00101	.04486	18.151	.00221
#2	.00137	.05554	.01760	3.0298	.04338	.00119	.04254	17.853	.00214
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Avg	.01203	.00374	.00618	.02537	1.9322	.02713	24.113	.09626	.02288
Stddev	.00013	.00011	.00062	.00180	.0393	.00083	.003	.00032	.00024
%RSD	1.0771	2.9518	10.091	7.0817	2.0344	3.0427	.01386	.33059	1.0685
#1	.01194	.00367	.00662	.02410	1.9600	.02772	24.115	.09649	.02305
#2	.01213	.00382	.00574	.02664	1.9044	.02655	24.111	.09604	.02271
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Avg	1.9485	.02021	.21622	.01086	22.114	.00902	.06252	.81687	1.7481
Stddev	.0053	.00017	.00240	.00020	.025	.00075	.00405	.01776	.0380
%RSD	.26964	.83220	1.1112	1.8050	.11305	8.3523	6.4757	2.1740	2.1740
#1	1.9522	.02009	.21792	.01100	22.097	.00955	.05966	.80431	1.7212
#2	1.9447	.02033	.21452	.01072	22.132	.00848	.06539	.82943	1.7750
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Avg	.04853	.07424	.02336	.02150	.04442	.01255	.01113	.01698	.00260
Stddev	.00067	.00012	.00023	.00046	.00138	.02565	.00069	.00080	.00385
%RSD	1.3906	.16165	1.0050	2.1225	3.1089	204.37	6.2449	4.7371	148.31
#1	.04805	.07415	.02319	.02183	.04345	.03069	.01064	.01641	.00532
#2	.04900	.07432	.02352	.02118	.04540	-.00559	.01162	.01755	-.00013
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Int. Std.									
Line									
Units									
Avg	2808.9	45987.	5468.6						
Stddev	6.9	64.	41.1						
%RSD	.24655	.13883	.75183						
#1	2813.8	45942.	5439.6						
#2	2804.0	46032.	5497.7						

Sample Name: 69708-E-1-C MSD @50 Acquired: 6/1/2015 19:42:00 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca) 50x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00109	.06770	.02498	.35565	.05172	.00119	.W .05250	.20.756	.00258
Stddev	.00089	.00012	.00274	.0067	.00032	.00008	.00041	.235	.00007
%RSD	81.270	.16987	10.965	.18718	.61574	6.7040	.77492	1.1308	2.7370
#1	.00172	.06762	.02304	3.5518	.05194	.00113	.05278	20.922	.00263
#2	.00046	.06778	.02692	3.5612	.05149	.00125	.05221	20.590	.00253
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass					
High Limit							.05000		
Low Limit							-.05000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01489	.00480	.00733	.03284	.2.2652	.03318	.28.235	.11278	.02760
Stddev	.00001	.00013	.00023	.00197	.1144	.00125	.067	.00138	.00093
%RSD	.03848	2.6950	3.0971	6.0080	5.0515	3.7715	.23594	1.2206	3.3854
#1	.01489	.00470	.00749	.03144	2.1843	.03230	28.282	.11375	.02826
#2	.01488	.00489	.00717	.03423	2.3462	.03407	28.188	.11181	.02694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3026	.02323	.26834	.01209	.26.096	.01312	.07916	.96972	.2.0752
Stddev	.0107	.00012	.00298	.00181	.035	.00032	.00216	.02482	.0531
%RSD	.46323	.52139	1.1124	14.935	.13476	2.4750	2.7244	2.5593	2.5593
#1	2.3101	.02332	.27045	.01081	26.071	.01289	.07763	.98727	2.1128
#2	2.2951	.02315	.26623	.01337	26.120	.01335	.08068	.95217	2.0376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06068	.08778	.02623	.02653	.05247	.04979	.01354	.02093	.00518
Stddev	.00023	.00001	.00313	.00054	.00158	.05363	.00001	.00113	.00091
%RSD	.37663	.00750	11.923	2.0511	3.0167	107.71	.05046	5.4050	17.539
#1	.06052	.08778	.02844	.02692	.05135	.08771	.01354	.02173	.00454
#2	.06084	.08779	.02402	.02615	.05359	.01187	.01353	.02013	.00583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2795.8	45962.	5584.9						
Stddev	8.1	25.	100.9						
%RSD	.28997	.05406	1.8073						
#1	2801.5	45979.	5513.5						
#2	2790.0	45944.	5656.3						

Sample Name: 69708-E-1-A PDS @50 Acquired: 6/1/2015 19:44:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca) 50x

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04819	1.1000	.19384	2.8300	.09832	.04791	.00540	34.096	.05069
Stddev	.00007	.0018	.00279	.0003	.00011	.00031	.00031	.039	.00049
%RSD	.15095	.16624	1.4401	.00980	.11282	.65261	5.7199	.11331	.97483
#1	.04814	1.0987	.19581	2.8298	.09840	.04813	.00518	34.123	.05034
#2	.04824	1.1013	.19186	2.8302	.09824	.04769	.00561	34.069	.05104
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05146	.04098	.04762	1.1460	20.891	.10848	40.304	.12972	.04952
Stddev	.00011	.00045	.00041	.0051	.080	.00291	.009	.00038	.00003
%RSD	.20506	1.0868	.86991	.44847	.38521	2.6857	.02340	.29305	.05872
#1	.05154	.04130	.04791	1.1496	20.834	.11054	40.297	.12999	.04954
#2	.05139	.04067	.04733	1.1424	20.948	.10642	40.311	.12945	.04950
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na8183 818.326 {41}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.030	.05926	W 2.0690	.09928	19.789	.09325	.20800	5.5356	11.846
Stddev	.534	.00038	.0017	.00180	.020	.00211	.00574	.0312	.067
%RSD	2.6642	.63808	.08302	1.8103	.10124	2.2654	2.7598	.56347	.56347
#1	20.407	.05899	2.0678	.09801	19.774	.09474	.20394	5.5577	11.893
#2	19.652	.05952	2.0702	.10055	19.803	.09175	.21206	5.5136	11.799
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Warn 2.0000 -1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10691	.09667	.20748	.05102	.19352	.46479	.05338	.25168	.03608
Stddev	.00025	.00010	.00068	.00019	.00064	.00272	.00030	.00140	.00001
%RSD	.23152	.10060	.32962	.36274	.33044	.58551	.55683	.55785	.04135
#1	.10709	.09674	.20796	.05115	.19307	.46287	.05317	.25068	.03607
#2	.10674	.09661	.20699	.05089	.19398	.46672	.05359	.25267	.03609
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	2705.7	44841.	5393.4						
Stddev	9.3	345.	11.0						
%RSD	.34412	.77001	.20480						
#1	2712.3	45085.	5385.6						
#2	2699.1	44597.	5401.2						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 19:47:11 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00397	Al3092 ppm 50.270	As1890 ppm -00229	B_2089 ppm .00827	Ba4554 ppm .00128	Be3130 ppm -0.0006	Bi2230 ppm W .94294	Ca3179 ppm .03523	Cd2288 ppm -0.00039	Co2286 ppm -0.00039	Cr2055 ppm .00078
#1	.00359	50.454	-.00172	.00892	.00100	-.00004	.94098	.04025	-.00037	-.00029	.00078
#2	.00435	50.085	-.00286	.00761	.00155	-.00008	.94489	.03020	-.00041	-.00050	.00077
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 -5.0000%	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00291	Fe2714 ppm 47.895	K_7664 ppm .33981	Li6707 ppm .00738	Mg2790 ppm .06797	Mn2576 ppm -.00172	Mo2020 ppm -.00103	Na8183 ppm 247.33	Ni2316 ppm .00271	P_1782 ppm -.00473	Pb2203 ppm -.00148
#1	-.00299	48.112	.33924	.00747	.06578	-.00173	-.00109	247.73	.00285	-.00543	.00161
#2	-.00283	47.679	.34038	.00730	.07016	-.00171	-.00096	246.93	.00257	-.00403	.00135
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm W 4.5324	Sb2068 ppm -.01242	Se1960 ppm .00265	Si2881 ppm .00133	SiO2 ppm .00284	Sn1899 ppm .00218	Sr4077 ppm -.00048	Th2837 ppm 5.1213	Ti3349 ppm -.01168	TI1908 ppm .00387	U_3701 ppm 10.367
#1	4.5007	-.01119	.00043	-.01007	-.02155	-.00144	.00040	5.1175	-.01154	.00322	10.362
#2	4.5642	-.01365	.00488	.01272	.02723	-.00291	.00056	5.1252	-.01181	.00451	10.373
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	Chk Pass	None	None	Chk Pass	
Elem Units Avg Stddev %RSD	V_2924 ppm .00301	Zn2062 ppm -.00118	Zr3391 ppm -.15993								
#1	.00268	-.00074	-.16109								
#2	.00335	-.00163	-.15877								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2769.0	Y_3600 Cts/S 44271.	Y_3774 Cts/S 5347.5								
#1	2735.4	44330.	5304.6								
#2	2802.6	44211.	5390.3								

Sample Name: CCV-3296664 Acquired: 6/1/2015 19:49:48 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.51567	F .56181	.97049	.49254	.47025	.46950	-.00085	4.8455	.49742	.52159	F .42064	.47668
Stddev	.00099	.00564	.00162	.00248	.00046	.00039	.00075	.0026	.00037	.00125	.00171	.00168
%RSD	.19282	1.0048	.16724	.50372	.09816	.08383	88.520	.05257	.07493	.24023	.40647	.35345

#1	.51497	.56580	.96934	.49079	.47058	.46978	-.00032	4.8473	.49769	.52071	.42185	.47787
#2	.51637	.55781	.97163	.49430	.46993	.46922	-.00138	4.8437	.49716	.52248	.41943	.47549

Check ? Value Range	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
		.50000									.50000	
		10.490%									-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3719	50.108	.98634	20.322	.53996	.50429	5.1917	.52399	1.0171	.98851	-.01414	.94360
Stddev	.0074	.018	.00249	.008	.00003	.00071	.0011	.00045	.0036	.00429	.00015	.00505
%RSD	.31268	.03575	.25273	.03722	.00643	.14013	.02063	.08637	.34963	.43418	1.0639	.53495
#1	2.3772	50.095	.98810	20.327	.53993	.50479	5.1925	.52431	1.0196	.99155	-.01425	.94717
#2	2.3667	50.121	.98457	20.316	.53998	.50379	5.1909	.52367	1.0146	.98548	-.01404	.94003

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.92816	4.9722	10.640	1.0101	.47308	-.00313	.52549	.97939	-.04988	.53999	F .58721	.46973
Stddev	.00443	.0206	.044	.0023	.00088	.00275	.00066	.00135	.00175	.00106	.00004	.00104
%RSD	.47746	.41352	.41352	.23038	.18580	87.729	.12634	.13735	3.5078	.19713	.00684	.22141
#1	.93130	4.9576	10.609	1.0117	.47370	-.00507	.52502	.98034	-.04864	.53924	.58724	.46900
#2	.92503	4.9867	10.672	1.0084	.47246	-.00119	.52596	.97844	-.05112	.54074	.58718	.47047

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass				
											.50000	
											10.490%	

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S									
Avg	2772.9	45019.	5368.1									
Stddev	7.3	86.	27.3									
%RSD	.26353	.19148	.50908									
#1	2778.0	45080.	5348.8									
#2	2767.7	44958.	5387.4									

Sample Name: CCB Acquired: 6/1/2015 19:52:19 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	-.00006	.00071	.00447	.00020	-.00004	.00170	.00338	-.00026	.00002	.00027
Stddev	.00061	.00054	.00584	.00062	.00029	.00017	.00233	.00377	.00010	.00008	.00037
%RSD	696.18	964.66	824.57	13.814	141.29	376.62	137.18	111.50	38.939	371.52	137.59
#1	-.00034	-.00044	-.00342	.00404	.00000	-.00016	.00005	.00071	-.00019	.00008	.00053
#2	.00052	.00033	.00483	.00491	.00041	.00007	.00334	.00604	-.00033	-.00003	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	-.00039	.36931	.00338	-.00170	.00012	-.00009	.08573	.00050	-.00602	F -.00383
Stddev	.00019	.00062	.02992	.00075	.00654	.00005	.00011	.01252	.00009	.00246	.00249
%RSD	219.70	160.76	8.1013	22.285	385.02	38.626	122.40	14.608	17.754	40.882	64.988
#1	-.00022	-.00083	.34816	.00391	.00293	.00009	-.00001	.09458	.00044	-.00428	-.00560
#2	.00005	.00005	.39047	.00284	-.00632	.00016	-.00017	.07687	.00057	-.00776	-.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	
High Limit										.00300	
Low Limit										-.00300	
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01950	-.00264	F -.00621	.01405	.03006	-.00291	.00020	-.00038	-.00079	.00273	-.01974
Stddev	.00016	.00561	.00486	.01511	.03234	.00008	.00002	.00147	.00076	.00041	.02667
%RSD	.81716	212.17	78.274	107.59	107.59	2.8609	9.5723	390.02	96.171	15.014	135.13
#1	-.01939	-.00661	-.00965	.00336	.00719	-.00297	.00022	-.00142	-.00025	.00244	-.03859
#2	-.01961	.00132	-.00277	.02473	.05292	-.00285	.00019	.00066	-.00133	.00302	-.00088
Check ?	Chk Pass	Chk Pass	Chk Fail .00500 -.00500	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00057	-.00056	-.00641								
Stddev	.00007	.00105	.00216								
%RSD	12.994	185.84	33.718								
#1	.00051	.00018	-.00488								
#2	.00062	-.00130	-.00794								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2790.6	45897.	5434.5								
Stddev	27.3	61.	9.9								
%RSD	.97787	.13219	.18165								
#1	2809.9	45854.	5441.4								
#2	2771.4	45940.	5427.5								

Sample Name: CCVL3301032II Acquired: 6/1/2015 19:54:41 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01100	.11423	.01291	.10270	.01013	.00094	.10067	.20204	.00495	.01089	.00888	.01502
Stddev	.00041	.00099	.00469	.00051	.00008	.00006	.00108	.00329	.00009	.00018	.00003	.00018
%RSD	3.7472	.87076	36.329	.50056	.82273	6.2917	1.0772	1.6265	1.8308	1.6282	.34078	1.2219

#1	.01129	.11493	.01623	.10233	.01019	.00089	.09991	.19972	.00488	.01077	.00886	.01489
#2	.01071	.11353	.00960	.10306	.01007	.00098	.10144	.20437	.00501	.01102	.00890	.01515

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09842	3.4336	F.01524	.22134	.01153	.01952	1.1622	.04333	2.9773	.00710	-.02705	.00908
Stddev	.00014	.0065	.00121	.00577	.00002	.00052	.0110	.00021	.0104	.00156	.00272	.00073
%RSD	.14014	.18960	7.9381	2.6057	.14997	2.6433	.94797	.48759	.34921	21.988	10.073	8.0691

#1	.09832	3.4290	.01609	.22542	.01152	.01988	1.1544	.04348	2.9847	.00600	-.02898	.00857
#2	.09852	3.4382	.01438	.21726	.01154	.01915	1.1700	.04318	2.9700	.00820	-.02512	.00960

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
			30.000%									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00923	.52596	1.1256	.10079	.00983	.01559	.00992	.01883	.04990	.01117	F.02610	.00773
Stddev	.00036	.01260	.0270	.00034	.00008	.00150	.00020	.00036	.00894	.00086	.00035	.00091

#1	.00948	.51705	1.1065	.10055	.00989	.01665	.01007	.01908	.05623	.01178	.02586	.00709
#2	.00898	.53487	1.1446	.10103	.00977	.01453	.00978	.01858	.04358	.01056	.02635	.00838

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .02000	Chk Fail .01500								
			-30.000%								30.000%	-30.000%

Int. Std. Units	Y_2243 Cts/S		Y_3600 Cts/S
Avg	2822.9	45339.	5396.2
Stddev	28.3	95.	50.4
%RSD	1.0029	.21060	.93353

#1	2802.8	45272.	5360.6
#2	2842.9	45407.	5431.8

Sample Name: 280-69708-E-2-A @2 Acquired: 6/1/2015 19:57:21 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca Fe Mg) 2x

Elem Line	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.08303	-.00624	.16539	.04665	-.00002	.00366	12.818	-.00008
Stddev	.00031	.00047	.00293	.00157	.00037	.00014	.00013	.224	.00011
%RSD	95.669	.56673	46.900	.94803	.79839	659.02	3.5370	1.7499	136.43
#1	.00010	.08336	-.00831	.16650	.04691	-.00012	.00357	12.977	.00000
#2	.00054	.08270	-.00417	.16428	.04639	.00008	.00375	12.659	-.00015
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00091	.00066	.01042	4.0894	.00905	2.5212	.00036	.00641
Stddev	.00014	.00023	.00037	.00131	.0665	.00083	.0097	.00013	.00009
%RSD	125.20	25.497	56.040	12.576	1.6271	9.1704	.38609	34.600	1.4495
#1	.00021	.00107	.00040	.00950	4.0423	.00847	2.5280	.00045	.00648
#2	.00001	.00074	.00093	.01135	4.1364	.00964	2.5143	.00028	.00635
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.7247	.00194	-.00772	.00023	6.4282	-.00148	W -.00640	1.6824	3.6003
Stddev	.0552	.00040	.00187	.00014	.0790	.00126	.00049	.0113	.0242
%RSD	1.4820	20.474	24.265	60.432	1.2282	84.925	7.6660	.67116	.67116
#1	3.7637	.00166	-.00639	.00033	6.4840	-.00237	-.00605	1.6744	3.5832
#2	3.6856	.00222	-.00904	.00013	6.3724	-.00059	-.00674	1.6904	3.6174
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass	Chk Pass				
Elem Line	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00160	.11345	.00046	-.00062	.00022	-.04602	.00155	.00100	-.00413
Stddev	.00011	.00155	.00057	.00037	.00268	.03459	.00072	.00018	.00087
%RSD	6.6325	1.3670	123.58	59.211	1205.8	75.169	46.602	17.558	21.163
#1	.00152	.11455	.00006	-.00036	-.00167	-.02156	.00104	.00113	-.00351
#2	.00167	.11235	.00087	-.00088	.00212	-.07048	.00206	.00088	-.00475
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std.	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
Line	Cts/S	Cts/S	Cts/S						
Units									
Avg	2836.6	46366.	5676.9						
Stddev	2.6	37.	143.7						
%RSD	.09252	.07931	2.5314						
#1	2834.7	46392.	5575.3						
#2	2838.5	46340.	5778.6						

Sample Name: 280-69708-E-3-A @2 Acquired: 6/1/2015 19:59:59 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca Fe) 2x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00050	.00710	-.00163	.01519	.01809	-.00008	.00219	8.0381	-.00043
#2	.00039	.00053	.00030	.00008	.00008	.00001	.00138	.0537	.00021
	77.232	7.4282	18.416	.52081	.45710	9.9481	63.266	.66811	48.406
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	-.00017	.00028	.00016	.03297	1.4246	.00874	5.2266	.00299	-.00071
#2	.00025	.00063	.00094	.02940	1.4470	.00402	5.2234	.00315	-.00042
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	2.8947	.00204	-.00439	-.00148	8.4482	-.00568	W -.00617	.84325	1.8045
#2	.0065	.00029	.00009	.00098	.0090	.00304	.00185	.01076	.0230
	.22533	13.998	2.0499	66.028	.10676	53.450	29.987	1.2763	1.2763
Check ? High Limit Low Limit	Chk Pass	Chk Warn 5.0000 -.00500	Chk Pass	Chk Pass					
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00216	.03162	-.00032	-.00052	-.00049	.01959	-.00048	.00134	-.00354
#2	.00100	.00003	.00164	.00031	.00317	.04223	.00017	.00050	.00053
	46.353	.08127	505.08	60.514	652.09	215.61	36.311	36.992	14.940
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2820.9	46130.	5452.2						
#2	2828.3	46109.	5508.5						

Sample Name: 280-69708-E-4-A @50 Acquired: 6/1/2015 20:02:38 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Ca) 50x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	.00099	-.00379	2.6651	.00170	.00000	-.00020	18.171	-.00040
Stddev	.00016	.00079	.00434	.0085	.00018	.00011	.00125	.166	.00014
%RSD	13.356	79.004	114.44	.31973	10.361	5188.0	618.64	.91206	36.040
#1	.00110	.00044	-.00072	2.6591	.00157	.00008	-.00108	18.288	-.00050
#2	.00132	.00155	-.00686	2.6711	.00182	-.00007	.00068	18.054	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00037	.00039	.00597	.70125	.00591	16.896	.06402	.00017
Stddev	.00021	.00002	.00039	.00198	.00756	.00097	.003	.00071	.00027
%RSD	35.199	4.2557	99.958	33.115	1.0778	16.372	.02060	1.1076	160.07
#1	.00074	.00036	.00011	.00736	.69591	.00660	16.898	.06452	.00036
#2	.00045	.00038	.00067	.00457	.70660	.00523	16.893	.06352	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.55109	.00454	-.00627	-.00019	16.948	-.00104	.00540	.48341	1.0345
Stddev	.01314	.00025	.00605	.00065	.066	.00067	.00058	.00219	.0047
%RSD	2.3844	5.5191	96.423	336.98	.38684	64.621	10.701	.45271	.45271
#1	.56038	.00472	-.00200	.00027	16.995	-.00056	.00581	.48496	1.0378
#2	.54180	.00437	-.01055	-.00066	16.902	-.00151	.00499	.48186	1.0312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00487	.05984	-.00084	-.00107	.00085	-.02988	-.00035	.00162	-.00493
Stddev	.00023	.00018	.00112	.00000	.00174	.01506	.00000	.00045	.00094
%RSD	4.7500	.29277	132.78	.23471	203.99	50.420	1.3319	27.836	19.029
#1	.00471	.05997	-.00005	-.00107	.00208	-.01922	-.00035	.00194	-.00427
#2	.00503	.05972	-.00163	-.00107	-.00038	-.04053	-.00034	.00130	-.00560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2826.0	46078.	5527.0						
Stddev	2.8	130.	59.5						
%RSD	.09938	.28267	1.0760						
#1	2824.1	45986.	5484.9						
#2	2828.0	46170.	5569.0						

Sample Name: 280-69708-E-5-A @2 Acquired: 6/1/2015 20:05:15 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Fe) 2x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	-.00011	.06374	-.00212	.44528	.04422	-.00016	-.00179	25.796	-.00013
#2	.00014	.06485	.00100	.45053	.04418	.00005	.00004	25.730	-.00020
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.00063	.00073	.00147	.11370	2.0401	.05981	6.2525	.01692	.03472
#2	-.00005	.00093	.00157	.11118	2.0197	.05994	6.2091	.01669	.03456
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	3.1111	.00357	-.00099	-.00071	23.551	-.00075	-.00168	.34594	.74030
#2	3.1543	.00354	.00090	.00283	23.728	.00129	-.00751	.34122	.73021
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00270	.07988	-.00176	.00114	-.00270	-.02355	.00060	.00075	-.00472
#2	.00260	.08057	-.00097	.00077	-.00378	-.03331	.00072	.00014	-.00627
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2848.5	46519.	5573.3						
#2	2861.1	46526.	5624.4						

Sample Name: 280-69708-E-6-A @2 Acquired: 6/1/2015 20:07:53 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Fe) 2x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al3092 309.271 {109}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
#1	.00067	9.0037	.00031	.11734	.01260	.00308	.00241	107.27	.00154
#2	-.00014	8.9699	-.00302	.11618	.01267	.00303	.00327	108.08	.00182
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}
#1	.11414	.00225	.07295	2.5613	1.3072	.10786	42.367	1.9927	-.00321
#2	.11460	.00238	.07226	2.5787	1.3132	.10567	42.279	1.9963	-.00311
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2
#1	6.0847	.21323	.00663	.00657	161.70	.00128	-.00028	1.4573	3.1186
#2	6.1482	.21200	-.00118	.00513	161.58	.00123	-.00576	1.4446	3.0914
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}
#1	.00410	.17025	.00172	-.00112	-.00846	-.04455	-.00072	.41789	-.00776
#2	.00281	.17166	.00154	-.00112	-.01022	-.05829	-.00072	.41935	-.00661
Check ? High Limit Low Limit	Chk Pass	Chk Warn 45.000 -.05000	Chk Pass	Chk Pass	Chk Pass				
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}						
#1	2838.8	46490.	5620.8						
#2	2853.9	46446.	5649.0						

Sample Name: 280-69708-E-7-A @2 Acquired: 6/1/2015 20:10:28 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (B Fe) 2x

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 167.079 {502}	As1890 189.042 {478}	B_2089 208.959 {461}	Ba4554 455.403 {74}	Be3130 313.042 {108}	Bi2230 223.061 {451}	Ca3179 317.933 {106}	Cd2288 228.802 {447}
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass					
#1	.00074	.00272	.00178	.00217	.00043	-.00003	.00177	.01130	-.00029
#2	.00041	.00247	.00062	.00191	.00060	.00014	-.00087	.03611	-.00042
Co2286 228.616 {447}	Cr2055 205.560 {464}	Cu3247 324.754 {104}	Fe2599 259.940 {130}	K_7664 766.490 {44}	Li6707 670.784 {50}	Mg2790 279.079 {121}2	Mn2576 257.610 {131}	Mo2020 202.030 {467}	
Avg	-.00007	.00006	.00019	.00527	.30814	.00416	.00874	.00028	-.00051
Stddev	.00048	.00010	.00074	.00076	.00580	.00059	.00180	.00007	.00005
%RSD	683.61	171.68	395.46	14.467	1.8817	14.296	20.566	24.277	10.145
#1	.00027	-.00001	.00071	.00581	.30404	.00374	.00747	.00023	-.00054
#2	-.00041	.00012	-.00033	.00473	.31224	.00458	.01001	.00033	-.00047
Na5895 589.592 {57}	Ni2316 231.604 {446}	P_1782 178.284 {489}	Pb2203 220.353 {453}	S_1820 182.034 {485}	Sb2068 206.833 {463}	Se1960 196.090 {472}	Si2881 288.158 {117}	SiO2 288.158 {117}2	
Avg	.08457	.00047	-.00691	-.00197	-.00563	-.00167	W -.00678	.03964	.08482
Stddev	.00445	.00027	.00131	.00185	.00965	.00201	.00808	.00656	.01403
%RSD	5.2626	58.057	18.917	93.878	171.36	120.36	119.25	16.538	16.538
#1	.08142	.00027	-.00784	-.00066	.00119	-.00025	-.00106	.04427	.09474
#2	.08772	.00066	-.00599	-.00328	-.01246	-.00310	-.01249	.03500	.07490
Sn1899 189.989 {477}	Sr4077 407.771 {83}	Th2837 283.730 {119}	Ti3349 334.904 {101}	Tl1908 190.856 {477}	U_3701 370.152 {91}	V_2924 292.402 {115}	Zn2062 206.200 {163}	Zr3391 339.198 {99}	
Avg	.00188	.00014	.00021	-.00064	.00068	-.03442	-.00059	.00098	-.00736
Stddev	.00055	.00024	.00059	.00017	.00053	.00229	.00066	.00023	.00047
%RSD	29.368	170.94	283.89	26.898	77.433	6.6594	110.77	23.533	6.3836
#1	.00149	.00031	.00063	-.00076	.00106	-.03280	-.00106	.00114	-.00769
#2	.00227	-.00003	-.00021	-.00052	.00031	-.03604	-.00013	.00082	-.00703
Y_2243 224.306 {450}	Y_3600 360.073 {94}	Y_3774 377.433 {89}							
Int. Std. Line Units Avg Stddev %RSD	Cts/S 2836.0	Cts/S 46244.	Cts/S 5605.2						
#1	2835.0	46206.	5594.8						
#2	2837.1	46282.	5615.6						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 20:12:49 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al3092 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm
Avg	.00348	49.492	-00324	.00189	.00086	-00007	W .94045	.03118	-00006	-00008	.00061
Stddev	.00117	1.097	.00288	.00001	.00043	.00000	.00487	.00587	.00023	.00036	.00016
%RSD	33.699	2.2169	88.645	.31748	49.875	1.1159	.51733	18.818	384.60	427.90	26.379
#1	.00431	50.268	-.00528	.00190	.00055	-.00007	.94389	.03533	.00010	.00017	.00049
#2	.00265	48.716	-.00121	.00189	.00116	-.00007	.93701	.02703	-.00022	-.00034	.00072
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 -5.0000%	None	None	None	None
Elem Units	Cu3247 ppm	Fe2714 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na8183 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm
Avg	-.00287	46.719	.34723	.00552	.06656	-.00155	-.00123	243.64	.00282	-.00409	-.00174
Stddev	.00021	.538	.05254	.00040	.00621	.00005	.00021	4.46	.00001	.00316	.00114
%RSD	7.3555	1.1526	15.132	7.2768	9.3236	3.5272	17.164	1.8317	.51292	77.464	65.642
#1	-.00302	47.100	.38438	.00524	.06217	-.00158	-.00137	246.80	.00281	-.00632	-.00255
#2	-.00272	46.339	.31007	.00580	.07095	-.00151	-.00108	240.49	.00283	-.00185	-.00093
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units	S_1820 ppm	Sb2068 ppm	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm
Avg	W 4.5769	-.01122	.00436	-.01966	-.04206	-.00373	.00048	5.0388	-.01129	.00294	10.189
Stddev	.0229	.00075	.00024	.01284	.02748	.00034	.00006	.0068	.00089	.00255	.006
%RSD	.49979	6.6625	5.6040	65.339	65.339	9.0469	11.841	.13461	7.8632	86.802	.05934
#1	4.5931	-.01069	.00418	-.02874	-.06150	-.00350	.00052	5.0436	-.01066	.00475	10.184
#2	4.5608	-.01175	.00453	-.01057	-.02263	-.00397	.00044	5.0340	-.01192	.00114	10.193
Check ? Value Range	Chk Warn 5.0000 -5.0000%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units	V_2924 ppm	Zn2062 ppm	Zr3391 ppm								
Avg	.00176	-.00075	-.15426								
Stddev	.00015	.00109	.00183								
%RSD	8.8080	145.59	1.1862								
#1	.00186	-.00152	-.15555								
#2	.00165	.00002	-.15296								
Check ? Value Range	None	None	None								
Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S								
Avg	2812.7	45407.	5524.2								
Stddev	1.3	87.	141.9								
%RSD	.04517	.19104	2.5689								
#1	2813.6	45346.	5423.9								
#2	2811.8	45468.	5624.6								

Sample Name: CCV-3296664 Acquired: 6/1/2015 20:15:24 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.50495	.54699	.95414	.47778	.46274	.46095	.00021	.47467	.48661	.50715	F .42045	.46432
Stddev	.00036	.00001	.01168	.00136	.01066	.01098	.00071	.0997	.00084	.00223	.00139	.00241
%RSD	.07053	.00232	1.2240	.28422	2.3047	2.3811	340.06	2.1010	.17361	.43892	.33048	.51858
#1	.50470	.54699	.96239	.47682	.45520	.45319	.00071	4.6762	.48601	.50873	.42143	.46262
#2	.50521	.54698	.94588	.47874	.47028	.46871	-.00029	4.8173	.48721	.50558	.41946	.46602

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass					
											-10.490%	

Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3413	49.500	.97609	19.804	.52722	.48912	5.0929	.50774	.98700	.95765	-.01218	.91542
Stddev	.0566	1.144	.02386	.032	.00118	.00201	.1103	.00378	.00038	.00265	.00003	.00647
%RSD	2.4173	2.3106	2.4442	.16263	.22413	.41056	2.1660	.74493	.03853	.27646	.25885	.70709
#1	2.3013	48.691	.95922	19.782	.52805	.49054	5.0149	.51042	.98727	.95952	-.01215	.91999
#2	2.3814	50.309	.99295	19.827	.52638	.48770	5.1709	.50507	.98673	.95577	-.01220	.91084

Check ? Value Range	Chk Pass	None	Chk Pass									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F .89078	4.8961	10.478	.98125	.46593	.00042	.51278	.95160	-.04923	.52624	F .57121	.46266
Stddev	.00735	.0949	.203	.00183	.01085	.00177	.00006	.00104	.04451	.00014	.00299	.01283
%RSD	.82551	1.9383	1.9383	.18629	2.3276	420.64	.01082	.10907	90.415	.02656	.52401	2.7724
#1	89598	4.8290	10.334	.98255	.45826	.00168	.51282	.95233	-.08070	.52614	.57332	.45359
#2	.88558	4.9632	10.621	.97996	.47360	-.00083	.51274	.95086	-.01776	.52634	.56909	.47173

Check ? Value Range	Chk Fail 1.0000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000	Chk Pass
												10.490%

Int. Std. Units	Y_2243 Cts/S		Y_3600 Cts/S
	2847.9	46304.	5508.9
Avg	1.5	36.	119.2
Stddev	.05164	.07737	2.1638
#1	2849.0	46279.	5593.2
#2	2846.9	46330.	5424.6

Sample Name: CCB Acquired: 6/1/2015 20:17:55 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	.00011	.00010	.00103	.00062	.00004	.00139	.00327	-.00026	.00007	.00025
Stddev	.00027	.00191	.00142	.00014	.00006	.00003	.00032	.00003	.00010	.00012	.00015
%RSD	32.115	1694.7	1492.4	13.876	9.2172	88.383	23.331	.97809	37.817	171.92	59.013
#1	.00102	-.00124	.00110	.00093	.00058	.00006	.00116	.00329	-.00033	.00016	.00036
#2	.00065	.00146	-.00091	.00114	.00066	.00001	.00162	.00325	-.00019	-.00002	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.00286	.30919	.00382	.01186	.00007	-.00018	.08458	.00001	-.00856	F -.00300
Stddev	.00004	.00304	.04304	.00029	.00018	.00003	.00033	.00467	.00120	.00071	.00192
%RSD	12.881	105.99	13.921	7.5337	1.5476	44.700	183.19	5.5226	14212.	8.2480	64.087
#1	.00031	.00501	.33963	.00362	.01173	.00010	-.00041	.08788	.00086	-.00906	-.00436
#2	.00037	.00072	.27875	.00403	.01199	.00005	.00005	.08127	-.00084	-.00806	-.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	
High Limit										.00300	
Low Limit										-.00300	
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02252	-.00131	F -.00706	.01893	.04051	-.00072	.00024	-.00198	-.00055	.00223	-.02687
Stddev	.00313	.00176	.00347	.00061	.00130	.00077	.00006	.00349	.00007	.00057	.02079
%RSD	13.892	133.66	49.208	3.1993	3.1993	107.49	24.142	176.36	12.665	25.418	77.356
#1	-.02031	-.00007	-.00951	.01936	.04143	-.00017	.00028	-.00444	-.00050	.00183	-.01217
#2	-.02473	-.00256	-.00460	.01850	.03960	-.00126	.00020	.00049	-.00060	.00263	-.04157
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00069	-.00056	-.00603								
Stddev	.00061	.00030	.00188								
%RSD	88.627	52.773	31.166								
#1	-.00112	-.00077	-.00470								
#2	-.00026	-.00035	-.00736								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2874.7	46731.	5523.0								
Stddev	.5	73.	143.3								
%RSD	.01685	.15592	2.5943								
#1	2874.4	46680.	5421.7								
#2	2875.1	46783.	5624.4								

Sample Name: CCVL3301032 Acquired: 6/1/2015 20:20:18 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01001	.11113	.01127	.09613	.00974	.00091	.09972	.20506	.00486	.01081	.00896	.01385
Stddev	.00064	.00003	.00158	.00060	.00023	.00006	.00175	.00697	.00008	.00021	.00030	.00055
%RSD	6.4399	.03030	13.999	.62481	2.3621	6.1423	1.7506	3.3991	1.7130	1.9417	3.3273	3.9699
#1	.01047	.11115	.01016	.09655	.00990	.00087	.10095	.20998	.00492	.01096	.00875	.01424
#2	.00955	.11110	.01239	.09570	.00957	.00095	.09849	.20013	.00481	.01066	.00917	.01346

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09756	3.3812	F.01361	.21288	.01112	.01935	1.1141	.04170	2.9065	.00866	-.01796	F.00679
Stddev	.00228	.1281	.00106	.00126	.00000	.00035	.0262	.00023	.0001	.00331	.00308	.00037
%RSD	2.3363	3.7870	7.7586	.59402	.01849	1.8311	2.3490	.55214	.00418	38.287	17.144	5.3992
#1	.09918	3.4718	.01436	.21378	.01112	.01960	1.1326	.04154	2.9066	.00631	-.02013	.00705
#2	.09595	3.2907	.01287	.21199	.01112	.01910	1.0956	.04186	2.9064	.01100	-.01578	.00653

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Fail .01000						
			30.000%									-30.000%

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F.00626	.49788	1.0655	.09778	.00986	.01368	.01011	.01852	.05801	.01081	.02580	F.00770
Stddev	.00083	.01430	.0306	.00178	.00045	.00077	.00010	.00126	.00266	.00063	.00057	.00121
%RSD	13.252	2.8718	2.8718	1.8221	4.5623	5.6427	1.0370	6.8155	4.5894	5.8344	2.2127	15.724
#1	.00685	.50799	1.0871	.09652	.01018	.01313	.01018	.01941	.05613	.01125	.02621	.00684
#2	.00567	.48777	1.0438	.09904	.00954	.01422	.01004	.01763	.05989	.01036	.02540	.00856

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .01500									
	-30.000%											-30.000%

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2899.7	47156.	5619.8
Stddev	.7	198.	198.2
%RSD	.02510	.42019	3.5258
#1	2900.3	47296.	5479.7
#2	2899.2	47015.	5759.9

Sample Name: 280-69708-E-4-A @2 Acquired: 6/1/2015 20:22:58 Type: Unk

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 279424 200.7 FG (Fe) 2x hi-B

Elem Line Units Avg Stddev %RSD	Ag3280 328.068 {103}	Al1670 ppm .00129	As1890 ppm .03148	B_2089 ppm W 57.032	Ba4554 ppm .01892	Be3130 ppm .00014	Bi2230 ppm .00267	Ca3179 ppm 370.36	Cd2288 ppm -.00007
#1	.00125	.03154	.01316	56.838	.01887	.00015	.00166	372.65	-.00005
#2	.00133	.03143	.01339	57.227	.01897	.00014	.00369	368.07	-.00009
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Warn 10.000 -.01000	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Co2286 228.616 {447}	Cr2055 ppm .00754	Cu3247 ppm .00123	Fe2599 ppm .00227	K_7664 ppm 766.490 {44}	Li6707 ppm 670.784 {50}	Mg2790 ppm 279.079 {121}2	Mn2576 ppm 257.610 {131}	Mo2020 ppm 202.030 {467}
#1	.00740	.00112	.00228	.01542	9.2869	.06793	364.33	1.2957	.02744
#2	.00768	.00134	.00226	.01565	9.3383	.06807	368.29	1.3093	.02700
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Na5895 589.592 {57}	Ni2316 ppm 10.158	P_1782 ppm .04646	Pb2203 ppm .04617	S_1820 ppm .00275	Sb2068 ppm F 373.30	Se1960 ppm .00853	Si2881 ppm .21361	SiO2 ppm 10.062
#1	10.157	.04602	.04578	.00444	371.97	.01054	.21304	10.019	21.442
#2	10.159	.04690	.04656	.00105	374.63	.00651	.21417	10.105	21.625
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 200.00 -.20000	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Elem Line Units Avg Stddev %RSD	Sn1899 189.989 {477}	Sr4077 ppm .00314	Th2837 ppm 1.2271	Ti3349 ppm .00161	Tl1908 ppm -.00082	U_3701 ppm -.00595	V_2924 ppm F -.10593	Zn2062 ppm .00264	Zr3391 ppm .03375
#1	.00495	1.2248	.00188	-.00106	-.00564	-.10811	.00161	.03217	-.00784
#2	.00134	1.2294	.00133	-.00059	-.00626	-.10376	.00367	.03534	-.00519
Check ? High Limit Low Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail 50.000 -.10000	Chk Pass	Chk Pass	Chk Pass
Int. Std. Line Units Avg Stddev %RSD	Y_2243 224.306 {450}	Y_3600 Cts/S 2643.9	Y_3774 Cts/S 15.1	377.433 {89} 5465.6				Zn2062 ppm 206.200 {163}	Zr3391 ppm 339.198 {99}
#1	2633.2	43963.	5410.5						
#2	2654.6	43865.	5520.7						

Sample Name: CCVH-3294468 Acquired: 6/1/2015 20:26:07 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units Avg Stddev %RSD	Ag3280 ppm .00395	Al3092 ppm 48.209	As1890 ppm .00035	B_2089 ppm .07500	Ba4554 ppm .00104	Be3130 ppm .00007	Bi2230 ppm W .90870	Ca3179 ppm .04079	Cd2288 ppm -.00036	Co2286 ppm .00010	Cr2055 ppm .00059
#1	.00394	48.166	.00015	.08046	.00072	.00008	.91873	.03805	-.00049	.00004	.00058
#2	.00397	48.252	.00054	.06953	.00136	.00006	.89867	.04353	-.00024	.00016	.00060
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Warn 1.0000 -5.0000%	None	None	None	None
Elem Units Avg Stddev %RSD	Cu3247 ppm -.00244	Fe2714 ppm 46.067	K_7664 ppm .31900	Li6707 ppm .00337	Mg2790 ppm .09814	Mn2576 ppm -.00133	Mo2020 ppm -.00107	Na8183 ppm 238.27	Ni2316 ppm .00241	P_1782 ppm -.00439	Pb2203 ppm -.00079
#1	-.00202	46.001	.31897	.00418	.12586	-.00108	-.00088	237.93	.00236	-.00011	-.00029
#2	-.00286	46.133	.31903	.00256	.07043	-.00158	-.00127	238.61	.00247	-.00867	-.00129
Check ? Value Range	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Elem Units Avg Stddev %RSD	S_1820 ppm F 4.3711	Sb2068 ppm -.01077	Se1960 ppm -.00060	Si2881 ppm -.00808	SiO2 ppm -.01728	Sn1899 ppm -.00340	Sr4077 ppm .00053	Th2837 ppm 4.9348	Ti3349 ppm -.01124	TI1908 ppm .00409	U_3701 ppm 10.033
#1	4.4194	-.01127	0.00013	-.00734	-.01571	-.00355	.00055	4.9383	-.01155	.00434	10.017
#2	4.3228	-.01027	-.00133	-.00881	-.01886	-.00326	.00052	4.9313	-.01093	.00384	10.049
Check ? Value Range	Chk Fail 5.0000 -10.490%	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Elem Units Avg Stddev %RSD	V_2924 ppm .00233	Zn2062 ppm -.00167	Zr3391 ppm -.15114								
#1	.00255	-.00221	-.15286								
#2	.00211	-.00114	-.14941								
Check ? Value Range	None	None	None								
Int. Std. Units Avg Stddev %RSD	Y_2243 Cts/S 2839.6	Y_3600 Cts/S 45920.	Y_3774 Cts/S 5590.1								
#1	2851.7	45799.	5581.6								
#2	2827.5	46040.	5598.7								

Sample Name: CCV-3296664 Acquired: 6/1/2015 20:28:44 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.51895	F .56146	.97518	.53496	.47856	.47660	.00214	4.8713	.50085	.51416	F .41362	.47688
Stddev	.00158	.00348	.00851	.00904	.00062	.00002	.00283	.0056	.00320	.00919	.00795	.00006
%RSD	.30419	.61929	.87314	1.6890	.12971	.00375	132.17	.11584	.63916	1.7878	1.9220	.01253
#1	.52007	.56392	.98120	.54135	.47900	.47661	.00414	4.8673	.50312	.52066	.41924	.47684
#2	.51783	.55901	.96916	.52857	.47812	.47659	.00014	4.8753	.49859	.50766	.40800	.47692

Check ? Value Range	Chk Pass	Chk Fail .50000 10.490%	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail .50000 -10.490%	Chk Pass
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	2.3877	50.940	1.0064	20.299	.54333	.49770	5.2226	.51652	1.0088	.97498	-.00713	.93296
Stddev	.0084	.053	.0011	.065	.00067	.00724	.0086	.00841	.0130	.01445	.00396	.01826
%RSD	.35267	.10424	.11375	.31834	.12267	1.4554	.16537	1.6280	1.2910	1.4824	55.554	1.9577
#1	2.3818	50.977	1.0056	20.345	.54380	.50282	5.2287	.52246	1.0180	.98520	-.00992	.94588
#2	2.3937	50.902	1.0072	20.254	.54286	.49258	5.2165	.51057	.99959	.96476	-.00433	.92004

Check ? Value Range	Chk Pass	None	Chk Pass									
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Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	TI1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	.91493	4.9786	10.654	.99254	.48066	-.00190	.52674	.96412	-.04382	.54428	F .58476	.46628
Stddev	.01823	.0055	.012	.01084	.00123	.00042	.00071	.01860	.01820	.00011	.00759	.00221
%RSD	1.9928	.11109	.11109	1.0925	.25670	22.264	.13463	1.9287	41.542	.02075	1.2985	.47308
#1	.92783	4.9747	10.646	1.0002	.48153	-.00220	.52724	.97727	-.03095	.54420	.57940	.46472
#2	.90204	4.9825	10.663	.98487	.47979	-.00160	.52623	.95097	-.05669	.54436	.59013	.46784

Check ? Value Range	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail .50000 10.490%	Chk Pass				
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Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2760.1	44779.	5309.7
Stddev	.8	87.	15.0
%RSD	.02857	.19538	.28228
#1	2759.5	44717.	5299.1
#2	2760.6	44841.	5320.3

Sample Name: CCB Acquired: 6/1/2015 20:31:14 Type: QC
 Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	-.00056	-.00465	.03188	.00087	.00002	.00093	.00153	-.00046	.00002	.00014
Stddev	.00016	.00026	.00090	.00152	.00036	.00000	.00133	.00159	.00060	.00008	.00004
%RSD	30.720	47.225	19.262	4.7726	41.606	17.426	143.28	103.95	129.26	494.19	30.770
#1	.00040	-.00037	-.00529	.03296	.00061	.00002	.00187	.00041	-.00004	-.00004	.00017
#2	.00062	-.00074	-.00402	.03080	.00113	.00001	-.00001	.00266	-.00089	.00007	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00191	.33120	.00361	.00317	.00019	-.00020	.06808	.00026	F -.01043	-.00293
Stddev	.00007	.00280	.09323	.00284	.00727	.00005	.00018	.00347	.00006	.00133	.00072
%RSD	184.99	146.96	28.151	78.869	229.39	26.702	93.981	5.0902	22.225	12.736	24.491
#1	.00001	.00389	.39712	.00562	-.00197	.00015	-.00033	.06563	.00030	-.01137	-.00243
#2	-.00008	-.00007	.26527	.00160	.00831	.00022	-.00007	.07053	.00022	-.00949	-.00344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit									.01000		
Low Limit									-.01000		
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01793	-.00166	F -.00788	.01789	.03828	-.00055	.00015	-.00008	-.00071	.00401	-.01767
Stddev	.00448	.00055	.00227	.00581	.01242	.00087	.00003	.00062	.00093	.00077	.00749
%RSD	24.997	33.086	28.857	32.453	32.453	159.55	20.959	729.11	130.96	19.292	42.400
#1	-.01476	-.00127	-.00627	.01378	.02949	.00007	.00013	-.00052	-.00005	.00347	-.01237
#2	-.02110	-.00205	-.00949	.02199	.04706	-.00116	.00018	.00035	-.00136	.00456	-.02297
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500								
Low Limit			-.00500								
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00045	-.00029	-.00594								
Stddev	.00037	.00064	.00180								
%RSD	84.068	221.74	30.287								
#1	-.00071	.00016	-.00467								
#2	-.00018	-.00074	-.00721								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2801.5	45347.	5497.6								
Stddev	6.7	107.	3.2								
%RSD	.23867	.23694	.05908								
#1	2806.2	45423.	5499.9								
#2	2796.8	45271.	5495.3								

Sample Name: CCVL3301032II Acquired: 6/1/2015 20:33:37 Type: QC

Method: 6500_025(v16) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES

Prep Date:

Custom ID2:

Custom ID3:

Comment:

Elem Units	Ag3280 ppm	Al1670 ppm	As1890 ppm	B_2089 ppm	Ba4554 ppm	Be3130 ppm	Bi2230 ppm	Ca3179 ppm	Cd2288 ppm	Co2286 ppm	Cr2055 ppm	Cu3247 ppm
Avg	.01098	.11417	.01619	.12689	.01019	.00087	.09856	.20177	.00473	.01080	.00874	.01429
Stddev	.00146	.00015	.00053	.00034	.00014	.00016	.00168	.00400	.00001	.00031	.00020	.00015
%RSD	13.289	.13219	3.2811	.26421	1.3891	18.759	1.7041	1.9817	.12448	2.9167	2.2456	1.0720

#1	.00995	.11406	.01581	.12712	.01029	.00098	.09975	.19894	.00472	.01102	.00888	.01440
#2	.01201	.11427	.01656	.12665	.01009	.00075	.09737	.20459	.00473	.01058	.00861	.01418

Check ? Value Range	Chk Pass											
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Elem Units	Fe2599 ppm	K_7664 ppm	Li6707 ppm	Mg2790 ppm	Mn2576 ppm	Mo2020 ppm	Na5895 ppm	Ni2316 ppm	P_1782 ppm	Pb2203 ppm	S_1820 ppm	Sb2068 ppm
Avg	.09798	3.3947	F	.01467	.20963	.01146	.01953	1.1158	.04309	2.9623	.00816	-.01428
Stddev	.00000	.0364	.00288	.00102	.00014	.00025	.0292	.00056	.0017	.00056	.00022	.00214
%RSD	.00033	1.0719	19.660	.48710	1.2098	1.2936	2.6182	1.2958	.05613	6.8003	1.5250	28.541
#1	.09798	3.4204	.01263	.21035	.01156	.01935	1.0951	.04269	2.9634	.00777	-.01413	.00599
#2	.09798	3.3690	.01671	.20891	.01136	.01971	1.1364	.04348	2.9611	.00855	-.01444	.00902

Check ? Value Range	Chk Pass	Chk Pass	Chk Fail .01000	Chk Pass	None	Chk Pass						
			30.000%									

Elem Units	Se1960 ppm	Si2881 ppm	SiO2 ppm	Sn1899 ppm	Sr4077 ppm	Th2837 ppm	Ti3349 ppm	Tl1908 ppm	U_3701 ppm	V_2924 ppm	Zn2062 ppm	Zr3391 ppm
Avg	F	.00737	.49395	1.0570	.10045	.00971	.01757	.01008	.01608	F	.02215	.0130
Stddev	.00128	.02384	.0510	.00009	.00009	.00009	.00243	.00007	.00104	.00091	.00070	.00177
%RSD	17.416	4.8261	4.8261	.09174	.93966	13.834	.74167	6.4511	4.1072	6.1777	6.9510	13.734
#1	.00827	.47709	1.0210	.10052	.00977	.01585	.01003	.01535	.02150	.01179	.02666	.00759
#2	.00646	.51080	1.0931	.10038	.00964	.01929	.01013	.01681	.02279	.01081	.02416	.00923

Check ? Value Range	Chk Fail .01500	Chk Pass	Chk Fail .06000	Chk Pass	Chk Pass	Chk Fail .01500						
			-30.000%						-30.000%			-30.000%

Int. Std. Units	Y_2243 Cts/S	Y_3600 Cts/S	Y_3774 Cts/S
Avg	2831.7	46014.	5482.1
Stddev	8.2	292.	4.6
%RSD	.28959	.63555	.08351
#1	2825.9	45807.	5478.9
#2	2837.5	46221.	5485.4

ICP Data Review Checklist

TALS BATCH NUMBER:	<u>279916, 19, 19, 20, 21</u>	Earliest due date:	<u>6/3/15</u>
Run Date:	<u>6/1/15</u>	Analyst:	<u>Chris Rhoades</u>
QC programs/Methods Run:		<u>6010B, 6010C, 200.7</u>	

Review Items	Yes	No	N/A	2nd Level
A. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			/
2. Method blank done per prep batch and < 1/2 RL or CRDL (CLP) or < 2.2x MDL 200.7?	✓			/
3. MS run at required frequency and within limits?	✓			/
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			/
5. Serial dilution done per prep batch (or per SDG for CLP)?	✓			/
6. Post digest spike analyzed if required (CLP, DOD & AFCEE only)? NCM Whether needed for DODV3, DODV4, DODV5, AFCEE 4.0, 6010C?	✓			/
B. Calibration/Instrument Run QC				
1. ICV/CCV analyzed at appropriate frequency and within control limits ? (6010B: CLP = 90 - 110%; 200.7: ICV = 95 - 105%, CCV 90-110%) If not in control, was the ICV or CCV reanalyzed twice to show return to control as per NELAP?	✓			/
2. ICB/CCB analyzed at appropriate frequency and < 1/2 RL or < 2X MDL (DOD V3, AFCEE 4.0)? Was it less than the LODV (DODV4 & DODV5)	✓			/
3. High Standard (HIGH) reanalyzed before samples and recovered within QC limits? (+5%)	✓			/
4. RL STD run and recovered within QC limits ? ($\pm 50\%$ for non-CLP, $\pm 20\%$ for DoD V3 / DoD V4 / DoD V5 / AFCEE 4.0 / USACE)	✓			/
5. Was the LLICV/LLCCV analyzed at appropriate frequency for 6010C and within control ($\pm 30\%$ or $\pm 20\%$)	✓			/
6. ICSA/ICSAB run at required frequency and within SOP limits? (ICSA < 2X MDL AFCEE 4.0, DOD V3 or < RL std work or < 2X RL 6010C, DOD V4, DOD V5)	✓			/
C. Sample Results				
1. For 6010B, were samples with concentrations > the linear range for any parameter diluted and reanalyzed? For 200.7, were samples with concentrations within 90% of the linear range diluted and reanalyzed?	✓			/
2. For DOD, were samples with concentrations > the daily linear range for any parameter diluted and reanalyzed?	✓			/
3. Are all reported results bracketed by in control QC?	✓			/
D. Other				
1. Are all nonconformances documented appropriately?	✓			/
2. Calculations checked for errors?	✓			/
3. Transcriptions checked for errors? (Example: Are dilution factors that are entered into the sequence log correct?)	✓			/
4. All client/project specific requirements met?	✓			/
5. Date/time of analysis verified as correct?	✓			/
6. PDF attached, verified uncorrupted?	✓			/

Analyst: Chris RhoadesDate: 6/2/15

Comments:

radical internal standard line fell low midway through the run2nd Level Reviewer: h. bathDate: 6/2/15

Comments:

Report Generated By CETAC QuickTrace**Analyst:** mooneyj**Worksheet file:** C:\Program Files\QuickTrace\Worksheets\2015\05-May\150526bb.wsz**Date Started:** 5/26/2015 4:00:51 PM**Comment:****Results**

Sample Name	Type	Date/Time	Conc (ppb)	μ Abs	%RSD	Flags	Wt.	Vol.
							ODF	
Cal Blank	STD	05/26/15 04:06:07 pm	0.000	194	1.02		1.00	1.00
							1.00	
Std1	STD	05/26/15 04:08:25 pm	0.100	412	0.65		1.00	1.00
							1.00	
Std2	STD	05/26/15 04:10:43 pm	0.200	848	0.99		1.00	1.00
							1.00	
Std3	STD	05/26/15 04:13:02 pm	0.500	2162	0.99		1.00	1.00
							1.00	
Std4	STD	05/26/15 04:15:21 pm	1.000	4221	0.80		1.00	1.00
							1.00	
Std5	STD	05/26/15 04:17:41 pm	2.000	8195	0.90		1.00	1.00
							1.00	
Std6	STD	05/26/15 04:20:02 pm	5.000	20340	0.29		1.00	1.00
							1.00	
Std7	STD	05/26/15 04:22:23 pm	10.000	39701	0.54		1.00	1.00
							1.00	

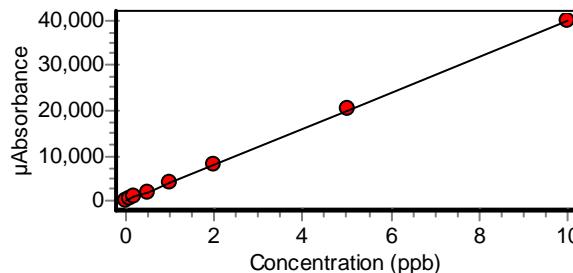
Calibration

Equation: $A = 181.237 + 3969.376C$

R2: 0.99987

SEE: 174.0756

Flags: C



ICV 3293103	ICV	05/26/15 04:24:56 pm	4.013	16111	0.76	1.00	1.00
% Recovery	100.33					1.00	
ICB	ICB	05/26/15 04:27:14 pm	0.000	181	3.09	1.00	1.00
						1.00	

Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.		Vol.	
								ODF			
CRA 3293106		CRDL	05/26/15 04:29:31 pm	0.058	413	1.37	Y	1.00	1.00		
% Recovery	29.25									1.00	
CCV 3293105		CCV	05/26/15 04:37:31 pm	6.137	24541	0.98	Q	1.00	1.00		
% Recovery	122.74									1.00	
CCV 3293105		CCV	05/26/15 04:41:44 pm	5.098	20415	0.71		1.00	1.00		
% Recovery	101.95									1.00	
CCV 3293105		CCV	05/26/15 04:44:05 pm	5.556	22234	0.66		1.00	1.00		
% Recovery	111.12									1.00	
CCB		CCB	05/26/15 04:46:22 pm	0.003	192	0.92		1.00	1.00		
										1.00	
LB2 280-278467/1-C		UNK	05/26/15 04:48:39 pm	-0.024	88	5.41		1.00	1.00		
										1.00	
LCS 280-278467/2-C		UNK	05/26/15 04:50:57 pm	5.080	20346	1.39		1.00	1.00		
										1.00	
280-69429-A-1-C		UNK	05/26/15 04:53:14 pm	0.003	195	4.45		1.00	1.00		
										1.00	
280-69429-A-2-C		UNK	05/26/15 04:55:32 pm	-0.001	178	2.78		1.00	1.00		
										1.00	
280-69429-A-3-E		UNK	05/26/15 04:57:50 pm	0.013	233	2.96		1.00	1.00		
										1.00	
280-69429-A-3-F MS		UNK	05/26/15 05:00:09 pm	4.949	19826	0.52		1.00	1.00		
										1.00	
280-69429-A-3-G MSD		UNK	05/26/15 05:02:28 pm	5.319	21294	0.50		1.00	1.00		
										1.00	
LB 280-278642/1-C		UNK	05/26/15 05:04:47 pm	-0.001	179	0.94		1.00	1.00		
										1.00	
LCS 280-278642/2-C		UNK	05/26/15 05:07:06 pm	6.114	24450	1.33		1.00	1.00		
										1.00	
280-69603-A-1-C		UNK	05/26/15 05:09:26 pm	148.380	589170	0.89	O	1.00	1.00		
										1.00	
CCV 3293105		CCV	05/26/15 05:14:23 pm	4.880	19552	0.47		1.00	1.00		
% Recovery	97.60									1.00	
CCB		CCB	05/26/15 05:16:40 pm	-0.006	157	1.87		1.00	1.00		
										1.00	

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
280-69603-A-2-E	UNK	05/26/15 05:19:00 pm	13.951	55559	0.57	O	1.00	1.00 1.00
280-69603-A-2-F DU	UNK	05/26/15 05:21:20 pm	13.692	54531	0.55	O	1.00	1.00
280-69603-A-2-G MS	UNK	05/26/15 05:23:37 pm	9.280	37018	0.63		1.00	1.00 1.00
LB2 280-278643/1-C	UNK	05/26/15 05:25:54 pm	-0.011	136	4.35		1.00	1.00 1.00
LCS 280-278643/2-C	UNK	05/26/15 05:28:11 pm	6.159	24629	1.52		1.00	1.00 1.00
280-69603-A-3-C	UNK	05/26/15 05:30:29 pm	0.006	204	1.00		1.00	1.00 1.00
280-69603-A-4-C	UNK	05/26/15 05:32:47 pm	9.687	38631	0.51		1.00	1.00 1.00
280-69603-A-5-E	UNK	05/26/15 05:35:05 pm	0.001	184	0.98		1.00	1.00 1.00
280-69603-A-5-F DU	UNK	05/26/15 05:37:23 pm	-0.003	169	0.67		1.00	1.00 1.00
280-69603-A-5-G MS	UNK	05/26/15 05:39:42 pm	6.482	25911	0.48		1.00	1.00 1.00
CCV 3293105 % Recovery 111.07	CCV	05/26/15 05:42:03 pm	5.554	22225	0.39		1.00	1.00 1.00
CCB	CCB	05/26/15 05:44:20 pm	0.000	180	1.47		1.00	1.00 1.00
LB 280-278466/1-E	UNK	05/26/15 05:46:39 pm	-0.015	123	1.70		1.00	1.00 1.00
LCS 280-278466/2-E	UNK	05/26/15 05:48:58 pm	6.290	25150	0.62		1.00	1.00 1.00
280-69488-C-1-I	UNK	05/26/15 05:51:18 pm	-0.022	93	2.23		1.00	1.00 1.00
280-69516-A-1-C	UNK	05/26/15 05:53:38 pm	0.001	185	0.77		1.00	1.00 1.00
280-69516-A-2-C	UNK	05/26/15 05:55:55 pm	-0.026	80	3.18		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
280-69327-A-1-D	UNK	05/26/15 05:58:12 pm	-0.025	82	2.03		1.00	1.00 1.00
280-69327-B-3-D	UNK	05/26/15 06:00:29 pm	-0.016	119	2.94		1.00	1.00
280-69327-A-5-D	UNK	05/26/15 06:02:47 pm	-0.031	60	0.87		1.00	1.00 1.00
280-69327-A-7-D	UNK	05/26/15 06:05:05 pm	-0.023	92	1.30		1.00	1.00 1.00
280-69327-A-9-D	UNK	05/26/15 06:07:23 pm	-0.021	98	0.45		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV 99.58	05/26/15 06:09:43 pm	4.979	19944	0.76		1.00	1.00 1.00
CCB	CCB	05/26/15 06:12:00 pm	-0.003	170	0.78		1.00	1.00 1.00
280-69513-A-5-C	UNK	05/26/15 06:14:19 pm	-0.029	66	10.27		1.00	1.00 1.00
280-69513-A-6-E	UNK	05/26/15 06:16:38 pm	-0.020	101	3.28		1.00	1.00 1.00
280-69513-A-6-F MS	UNK	05/26/15 06:18:57 pm	5.280	21141	0.97		1.00	1.00 1.00
280-69513-A-6-G MSD	UNK	05/26/15 06:21:16 pm	5.349	21412	1.11		1.00	1.00 1.00
MB 280-278968/1-A	UNK	05/26/15 06:23:36 pm	0.005	200	1.04		1.00	1.00 1.00
LCS 280-278968/2-A	UNK	05/26/15 06:25:56 pm	5.159	20658	0.79		1.00	1.00 1.00
280-69287-F-1-F	UNK	05/26/15 06:28:13 pm	0.072	468	1.01		1.00	1.00 1.00
280-69287-F-2-F	UNK	05/26/15 06:30:30 pm	-0.038	32	5.39		1.00	1.00 1.00
280-69287-F-3-D	UNK	05/26/15 06:32:48 pm	-0.035	41	8.29		1.00	1.00 1.00
280-69287-F-4-D	UNK	05/26/15 06:35:05 pm	-0.033	52	0.61		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
CCV 3293105	CCV	05/26/15 06:37:26 pm	6.257	25018	0.54	Q	1.00	1.00
% Recovery	125.14						1.00	
CCV 3293105	CCV	05/26/15 06:46:35 pm	5.258	21053	0.53		1.00	1.00
% Recovery	105.16						1.00	
CCV 3293105	CCV	05/26/15 06:48:55 pm	5.079	20340	0.44		1.00	1.00
% Recovery	101.57						1.00	
CCB	CCB	05/26/15 06:51:12 pm	0.004	199	2.35		1.00	1.00
							1.00	
280-69287-F-5-D	UNK	05/26/15 06:53:30 pm	0.057	407	0.99		1.00	1.00
							1.00	
280-69287-F-5-E MS	UNK	05/26/15 06:55:49 pm	5.549	22208	0.87		1.00	1.00
							1.00	
280-69287-F-5-F MSD	UNK	05/26/15 06:58:07 pm	5.908	23632	1.03		1.00	1.00
							1.00	
280-69287-F-6-F	UNK	05/26/15 07:00:26 pm	-0.039	26	6.91		1.00	1.00
							1.00	
MB 280-278984/1-A	UNK	05/26/15 07:02:45 pm	0.017	251	1.17		1.00	1.00
							1.00	
LCS 280-278984/2-A	UNK	05/26/15 07:05:04 pm	6.022	24086	0.74		1.00	1.00
							1.00	
LCSD 280-278984/3-A	UNK	05/26/15 07:07:24 pm	6.058	24226	0.62		1.00	1.00
							1.00	
280-69432-A-2-F	UNK	05/26/15 07:09:44 pm	-0.009	146	1.19		1.00	1.00
							1.00	
280-69456-H-1-M	UNK	05/26/15 07:12:01 pm	0.056	404	0.66		1.00	1.00
							1.00	
280-69456-H-1-N MS	UNK	05/26/15 07:14:19 pm	1.671	6815	1.42		1.00	1.00
							1.00	
CCV 3293105	CCV	05/26/15 07:16:40 pm	5.941	23763	1.89		1.00	1.00
% Recovery	118.82						1.00	
CCB	CCB	05/26/15 07:18:57 pm	-0.010	142	3.25		1.00	1.00
							1.00	
280-69456-H-1-O MSD	UNK	05/26/15 07:21:14 pm	2.083	8451	0.38		1.00	1.00
							1.00	

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
280-69456-H-2-G	UNK	05/26/15 07:23:32 pm	-0.073	-109	3.67		1.00	1.00 1.00
MB 280-278983/1-A	UNK	05/26/15 07:25:50 pm	-0.005	161	4.34		1.00	1.00 1.00
LCS 280-278983/2-A	UNK	05/26/15 07:28:08 pm	5.267	21089	1.69		1.00	1.00 1.00
280-68905-G-6-I	UNK	05/26/15 07:30:27 pm	-0.042	15	21.76		1.00	1.00 1.00
280-68905-G-8-I	UNK	05/26/15 07:32:45 pm	2.311	9352	1.42		1.00	1.00 1.00
280-69065-E-1-G	UNK	05/26/15 07:35:04 pm	-0.062	-66	3.17		1.00	1.00 1.00
280-69065-E-2-I	UNK	05/26/15 07:37:24 pm	-0.031	58	2.42		1.00	1.00 1.00
280-69126-F-4-K	UNK	05/26/15 07:39:43 pm	-0.040	24	3.88		1.00	1.00 1.00
280-69188-G-5-F	UNK	05/26/15 07:42:03 pm	-0.038	32	12.94		1.00	1.00 1.00
CCV 3293105 % Recovery 100.85	CCV	05/26/15 07:44:24 pm	5.043	20197	0.86		1.00	1.00 1.00
CCB	CCB	05/26/15 07:46:41 pm	-0.002	173	0.51		1.00	1.00 1.00
280-69188-G-6-L	UNK	05/26/15 07:48:59 pm	5.421	21700	1.58		1.00	1.00 1.00
280-69188-G-6-M MS	UNK	05/26/15 07:51:17 pm	8.420	33603	0.88		1.00	1.00 1.00
280-69188-G-6-N MSD	UNK	05/26/15 07:53:35 pm	6.842	27339	1.62		1.00	1.00 1.00
280-69267-G-2-I	UNK	05/26/15 07:55:53 pm	-0.192	-582	1.58		1.00	1.00 1.00
MB 280-278982/1-A	UNK	05/26/15 07:58:11 pm	-0.018	111	3.62		1.00	1.00 1.00
LCS 280-278982/2-A	UNK	05/26/15 08:00:30 pm	4.874	19527	0.88		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
280-68852-H-1-D	UNK	05/26/15 08:02:48 pm	0.764	3212	1.11		1.00	1.00 1.00
280-68852-H-2-D	UNK	05/26/15 08:05:07 pm	-0.033	51	2.65		1.00	1.00 1.00
280-68905-G-1-F	UNK	05/26/15 08:07:26 pm	3.849	15460	2.13		1.00	1.00 1.00
280-68905-G-1-G MS	UNK	05/26/15 08:09:45 pm	5.211	20866	1.94		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV 97.19	05/26/15 08:12:06 pm	4.860	19471	0.83		1.00	1.00 1.00
CCB	CCB	05/26/15 08:14:23 pm	-0.021	97	2.22		1.00	1.00 1.00
280-68905-G-1-H MSD	UNK	05/26/15 08:16:42 pm	5.798	23197	2.04		1.00	1.00 1.00
280-68905-G-2-D	UNK	05/26/15 08:19:02 pm	-0.222	-701	0.66		1.00	1.00 1.00
280-68905-G-3-F	UNK	05/26/15 08:21:21 pm	-0.051	-21	16.85		1.00	1.00 1.00
280-68905-G-4-F	UNK	05/26/15 08:23:39 pm	0.037	329	2.49		1.00	1.00 1.00
280-68905-G-5-D	UNK	05/26/15 08:25:57 pm	-0.043	10	45.64		1.00	1.00 1.00
280-68905-G-7-D	UNK	05/26/15 08:28:16 pm	1.520	6214	1.55		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV 99.58	05/26/15 08:30:36 pm	4.979	19945	1.19		1.00	1.00 1.00
CCB	CCB	05/26/15 08:32:53 pm	-0.006	157	2.17		1.00	1.00 1.00
MB 280-278965/1-A	UNK	05/26/15 08:35:12 pm	-0.004	165	1.25		1.00	1.00 1.00
LCS 280-278965/2-A	UNK	05/26/15 08:37:30 pm	4.946	19815	1.24		1.00	1.00 1.00
280-68780-G-1-F	UNK	05/26/15 08:39:48 pm	-0.015	120	0.88		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
280-68852-G-1-E	UNK	05/26/15 08:42:07 pm	107.780	428000	0.93	O	1.00	1.00 1.00
280-68852-G-2-E	UNK	05/26/15 08:53:59 pm	-0.071	-102	3.50		1.00	1.00
280-68852-F-3-I	UNK	05/26/15 08:56:18 pm	-0.046	-3	93.76		1.00	1.00 1.00
280-68852-F-3-J MS	UNK	05/26/15 08:58:38 pm	4.915	19692	1.28		1.00	1.00 1.00
280-68852-F-3-K MSD	UNK	05/26/15 09:00:58 pm	4.830	19352	1.14		1.00	1.00 1.00
280-68852-F-4-I	UNK	05/26/15 09:04:39 pm	3.096	12470	1.63		1.00	1.00 1.00
280-68852-G-1-E@50	UNK	05/26/15 09:07:30 pm	5.062	20275	1.62		1.00	1.00 1.00
CCV 3293105 % Recovery 100.48	CCV	05/26/15 09:09:51 pm	5.024	20123	1.32		1.00	1.00 1.00
CCB	CCB	05/26/15 09:12:08 pm	-0.004	164	2.46		1.00	1.00 1.00
MB 280-278983/1-A	UNK	05/26/15 09:14:26 pm	0.005	201	3.61		1.00	1.00 1.00
LCS 280-278983/2-A	UNK	05/26/15 09:16:44 pm	4.932	19757	1.31		1.00	1.00 1.00
280-68905-G-6-I	UNK	05/26/15 09:19:03 pm	-0.040	21	13.42		1.00	1.00 1.00
280-68905-G-8-I	UNK	05/26/15 09:21:22 pm	2.309	9344	1.72		1.00	1.00 1.00
280-69065-E-1-G	UNK	05/26/15 09:23:41 pm	-0.071	-100	2.37		1.00	1.00 1.00
280-69065-E-2-I	UNK	05/26/15 09:26:00 pm	-0.031	57	3.11		1.00	1.00 1.00
280-69126-F-4-K	UNK	05/26/15 09:28:20 pm	-0.030	63	9.08		1.00	1.00 1.00
280-69188-G-5-F	UNK	05/26/15 09:31:15 pm	-0.032	56	1.95		1.00	1.00 1.00

Sample Name		Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.		Vol.	
								ODF			
280-69267-G-2-I		UNK	05/26/15 09:33:34 pm	-0.030	63	5.09		1.00	1.00		
								1.00			
CCV 3293105		CCV	05/26/15 09:35:54 pm	6.116	24458	0.82	Q	1.00	1.00		
% Recovery	122.32							1.00			
BLANK		CCB	05/27/15 07:24:25 am	-0.041	17	20.87		1.00	1.00		
								1.00			
BLANK		CCB	05/27/15 07:26:42 am	0.003	195	1.32		1.00	1.00		
								1.00			
CCV 3293105		CCV	05/27/15 07:29:02 am	5.082	20352	0.42		1.00	1.00		
% Recovery	101.63							1.00			
CCB		CCB	05/27/15 07:31:19 am	0.002	191	1.10		1.00	1.00		
								1.00			
MB 280-278983/1-A		UNK	05/27/15 07:33:37 am	0.013	231	1.59		1.00	1.00		
								1.00			
LCS 280-278983/2-A		UNK	05/27/15 07:35:56 am	5.182	20750	0.33		1.00	1.00		
								1.00			
280-68905-G-6-I		UNK	05/27/15 07:38:14 am	-0.020	101	8.40	s	1.00	1.00		
								1.00			
280-68905-G-8-I		UNK	05/27/15 07:40:33 am	2.236	9055	0.38		1.00	1.00		
								1.00			
280-69065-E-1-G		UNK	05/27/15 07:42:52 am	-0.044	8	69.33		1.00	1.00		
								1.00			
280-69065-E-2-I		UNK	05/27/15 07:45:11 am	-0.014	124	2.27		1.00	1.00		
								1.00			
280-69126-F-4-K		UNK	05/27/15 07:47:31 am	-0.025	84	11.61		1.00	1.00		
								1.00			
280-69188-G-5-F		UNK	05/27/15 07:49:51 am	-0.023	89	9.80		1.00	1.00		
								1.00			
280-69267-G-2-I		UNK	05/27/15 07:52:09 am	-0.030	61	6.86		1.00	1.00		
								1.00			
CCV 3293105		CCV	05/27/15 07:54:29 am	5.411	21659	0.21		1.00	1.00		
% Recovery	108.22							1.00			
CCB		CCB	05/27/15 07:56:46 am	0.007	210	1.21		1.00	1.00		
								1.00			

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.		Vol.	
							ODF			
MB 280-278983/1-A	UNK	05/27/15 07:59:04 am	-0.023	89	20.57		1.00	1.00		
							1.00			
LCS 280-278983/2-A	UNK	05/27/15 08:01:22 am	-0.003	168	10.24	s	1.00	1.00		
							1.00			
280-68905-G-6-I	UNK	05/27/15 08:03:41 am	-0.027	75	3.71		1.00	1.00		
							1.00			
280-68905-G-8-I	UNK	05/27/15 08:05:59 am	1.849	7522	15.80	s	1.00	1.00		
							1.00			
280-69065-E-1-G	UNK	05/27/15 08:08:19 am	-0.052	-24	18.31		1.00	1.00		
							1.00			
280-69065-E-2-I	UNK	05/27/15 08:10:38 am	-0.019	107	3.19		1.00	1.00		
							1.00			
280-69126-F-4-K	UNK	05/27/15 08:12:58 am	-0.028	70	7.47		1.00	1.00		
							1.00			
280-69188-G-5-F	UNK	05/27/15 08:15:17 am	-0.029	65	2.84		1.00	1.00		
							1.00			
280-69267-G-2-I	UNK	05/27/15 08:17:35 am	-0.031	59	3.59		1.00	1.00		
							1.00			
CCV 3293105 % Recovery	125.58	CCV	05/27/15 08:19:56 am	6.279	25105	0.31	Q		1.00	1.00
									1.00	
CCV 3293105 % Recovery	118.18	CCV	05/27/15 08:45:12 am	5.909	23637	0.22			1.00	1.00
									1.00	
CCV 3293105 % Recovery	116.72	CCV	05/27/15 08:47:33 am	5.836	23347	0.22			1.00	1.00
									1.00	
CCB	CCB	05/27/15 08:49:50 am	0.011	226	1.58				1.00	1.00
									1.00	
280-69188-G-6-L	UNK	05/27/15 08:52:08 am	6.869	27446	0.17				1.00	1.00
									1.00	
280-69188-G-6-M MS	UNK	05/27/15 08:54:26 am	10.944	43623	0.21	O			1.00	1.00
									1.00	
280-69188-G-6-N MSD	UNK	05/27/15 08:56:44 am	8.261	32972	0.08				1.00	1.00
									1.00	
CCV 3293105 % Recovery	117.91	CCV	05/27/15 08:59:04 am	5.896	23583	0.23			1.00	1.00
									1.00	

Sample Name	Type	Date/Time	Conc (ppb)	μAbs	%RSD	Flags	Wt.	Vol.
							ODF	
CCB	CCB	05/27/15 09:01:21 am	0.001	184	2.10		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV	05/27/15 10:24:20 am	5.982	23927	0.26		1.00	1.00 1.00
CCB	CCB	05/27/15 10:26:37 am	0.007	208	1.24		1.00	1.00 1.00
280-69188-G-6-L@5	UNK	05/27/15 10:28:55 am	0.005	200	7.40 s		1.00	1.00 1.00
280-69188-G-6-L@5	UNK	05/27/15 10:32:45 am	1.562	6381	0.23		1.00	1.00 1.00
280-69188-G-6-M MS@5	UNK	05/27/15 10:35:03 am	2.542	10273	0.24		1.00	1.00 1.00
280-69188-G-6-N MSD@5	UNK	05/27/15 10:37:21 am	2.545	10284	0.32		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV	05/27/15 10:39:42 am	6.059	24230	0.10 Q		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV	05/27/15 10:50:45 am	5.420	21697	0.05		1.00	1.00 1.00
CCV 3293105 % Recovery	CCV	05/27/15 10:53:05 am	5.472	21901	0.07		1.00	1.00 1.00
CCB	CCB	05/27/15 10:55:22 am	0.008	214	1.14		1.00	1.00 1.00
280-69603-A-1-C@100	UNK	05/27/15 10:57:42 am	1.943	7894	0.26		1.00	1.00 1.00
280-69603-A-2-E@5	UNK	05/27/15 11:00:34 am	2.701	10901	0.23		1.00	1.00 1.00
280-69603-A-2-F DU@5	UNK	05/27/15 11:02:54 am	2.638	10652	0.28		1.00	1.00 1.00
280-69603-A-2-G MS@5	UNK	05/27/15 11:05:11 am	1.764	7184	0.20		1.00	1.00 1.00
LCS 280-278643/2-C	UNK	05/27/15 11:07:28 am	7.230	28880	0.06		1.00	1.00 1.00
280-69603-A-4-C@2	UNK	05/27/15 11:09:46 am	4.591	18403	0.30		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.
							ODF	
LCS 280-278642/2-C	UNK	05/27/15 11:12:05 am	7.334	29294	0.24		1.00	1.00
							1.00	
LCS 280-278466/2-E	UNK	05/27/15 11:14:25 am	7.254	28975	0.16		1.00	1.00
							1.00	
CCV 3293105	CCV	05/27/15 11:16:45 am	5.526	22116	0.14		1.00	1.00
% Recovery	110.52						1.00	
CCB	CCB	05/27/15 11:19:02 am	0.015	240	3.30		1.00	1.00
							1.00	

Analysis Parameters

Instrument M-7500 Mercury Analyzer

Conditions

Gas flow (mL/min)	Sample Uptake (s)	Rinse (s)	Read delay (s)	Replicates (#)	Replicate time (s)	Pump speed (%)	Wavelength (nm)
100	40.00	90.00	60.00	4	1.50	50	253.65
ASX Pump Rate (%)							

100

Instrumental Zero

Zero before first sample: No

Zero periodically: Yes

Before each calibration.

Baseline Correction

#1 Start time (s)	#1 End time (s)	#2 Start time (s)	#2 End time (s)
20.00	24.00		

Standby Mode

Enabled: Yes

Standby Options: pump off, gas off

Autodilution

Enabled: No

Condition:

Tube # range:

If no autodilution tubes remaining

Calibration

Settings

Algorithm	Through blank	Weighted fit	Cal. Type	Racalibration rate	Reslope rate	Reslope standard
Linear	No	No	Normal	0	0	N/A

Limits

Calibration slope		Reslope		Coeff. of Determination
Lower (%)	Upper (%)	Lower (%)	Upper (%)	
20	150	75	125	0.99500

Error action: Flag and continue

QC

GLP Override: Yes

QC Tests

CCB

Concentration

(ppb)

0.1000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICB

Concentration

(ppb)

0.0500

Failure flag: Z

Error action for manually inserted QC: Stop analysis

CCV

Concentration

(ppb)

Low Limit

%

High Limit

%

5.0000 80.0000 120.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICV

Concentration

(ppb)

Low Limit

%

High Limit

%

4.0000 94.6000 110.4000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

CRDL

Concentration

(ppb)

Low Limit

%

High Limit

%

0.2000 50.0000 150.0000

Failure flag: Y

Error action for manually inserted QC: Stop analysis

Method(s):

 245.1
 7470A

 245.1_DW
 7471A

7471B

Applicable QC Batches: 279184

Mercury Analysis Raw Data Checklist

Analyst's Checklist

1. Were the special instructions for prep and/or analysis followed?
2. Is the correlation coefficient ≥ 0.995 ?
3. Is the blank less than one-half the reporting limit or properly anomalous?
4. Are the LCSs within limits or properly anomalous?
5. Are the ICV and all CCVs within limits?
6. Are the ICB and all CCBs within \pm one-half the reporting limit from zero?
7. Were the CCVs and CCBs run with at most 10 samples between each set?
8. Are the reporting limits correct and reflect any dilutions?
9. Are the benchesheets complete (including calibration and standard verification #'s)?
10. Are all comments, footnotes, and anomalies properly documented?
11. Are holding time violation forms completed and attached?
12. Have all sample data been entered into LIMS?
13. Have all QC data been entered into LIMS?
14. Have the data entered into LIMS been checked for errors?
15. For TCLP results, is the sample data within 20% of Regulatory Level (0.2 mg/L)?
16. Are all passing CRAs set to acceptable?
17. Is the PDF attached?

 Analyst's Name: Christopher Shidale Date: 5/27/2015

Data Reviewer's Checklist

1. Have the calculations been checked?
2. Is the correlation coefficient ≥ 0.995 ?
3. Is all the QC data within the control limits and/or properly anomalous?
4. Are all the significant figures and reporting limits correct?
5. Have any comments, footnotes, and anomalies been properly documented?
6. Have any data errors been documented and entered into LIMS?
7. Is prep date correct in LIMS?
8. If TCLP result within 20% of Reg. Level (0.2 mg/l) and MS < 50%, was MSA performed?

 Reviewed by: CmTrull Date: 5/27/15

Comments:

Anomalies:

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 278466

Batch Start Date: 05/20/15 18:02

Batch Analyst: Bourgery, David F

Batch Method: 1311

Batch End Date: 05/21/15 10:17

Lab Sample ID	Client Sample ID	Method Chain	Basis	ExtractFluid					
LB 280-278466/1		1311, 3010A, 6010C		T1					
LCS 280-278466/2		1311, 3010A, 6010C		T1					
280-69513-A-5	54400-IDW01-0515	1311, 3010A, 6010C	P	T1					
280-69513-A-6	54400-IDW02-0515	1311, 3010A, 6010C	P	T1					

Batch Notes

First End time	05/21/15 10:17
First Start time	05/20/15 18:02

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6010C

Page 1 of 1

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 279206

Batch Start Date: 05/28/15 15:15

Batch Analyst: Johnson, Sarah E

Batch Method: 3010A

Batch End Date: 05/28/15 20:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ICP SPK 2B 00025	ICP SPK 3A 00097	TCLP Spike 00011
LB 280-278466/1-A		3010A, 6010C		<2 SU	10 mL	50 mL			
LCS 280-278466/2-A		3010A, 6010C		<2 SU	10 mL	50 mL	0.1 mL	0.1 mL	0.1 mL
280-69513-A-5-A	54400-IDW01-0515	3010A, 6010C	P	<2 SU	10 mL	50 mL			
280-69513-A-6-A	54400-IDW02-0515	3010A, 6010C	P	<2 SU	10 mL	50 mL			
280-69513-A-6-A MSD	54400-IDW02-0515	3010A, 6010C	P	<2 SU	10 mL	50 mL	0.1 mL	0.1 mL	0.1 mL
				<2 SU	10 mL	50 mL	0.1 mL	0.1 mL	0.1 mL

Batch Notes

Lot # of hydrochloric acid	0000102133-05/19
Lot # of Nitric Acid	0000042514-05/27
Hot Block ID number	4
Oven, Bath or Block Temperature 1	92 Degrees C
Oven, Bath or Block Temperature 2	94 Degrees C
Pipette ID	MET-89
ID number of the thermometer	QA-4
Digestion Tube/Cup Lot #	1408268
Uncorrected Temperature	92 Celsius
Uncorrected Temperature 2	94 Celsius

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6010C

Page 1 of 1

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 278466

Batch Start Date: 05/20/15 18:02

Batch Analyst: Bourgery, David F

Batch Method: 1311

Batch End Date: 05/21/15 10:17

Lab Sample ID	Client Sample ID	Method Chain	Basis	ExtractFluid					
LB 280-278466/1		1311, 7470A, 7470A		T1					
LCS 280-278466/2		1311, 7470A, 7470A		T1					
280-69513-A-5	54400-IDW01-0515	1311, 7470A, 7470A	P	T1					
280-69513-A-6	54400-IDW02-0515	1311, 7470A, 7470A	P	T1					

Batch Notes

First End time	05/21/15 10:17
First Start time	05/20/15 18:02

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 278942

Batch Start Date: 05/26/15 11:00

Batch Analyst: Grisdale, Christopher G

Batch Method: 7470A

Batch End Date: 05/26/15 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	Initial Amount	Final Amount	Hg Daily Spk 01378		
LB 280-278466/1-A		7470A, 7470A		<2	30 mL	30 mL			
LCS 280-278466/2-A		7470A, 7470A		<2	30 mL	30 mL	1.5 mL		
280-69513-A-5-A	54400-IDW01-0515	7470A, 7470A	P	<2	30 mL	30 mL			
280-69513-A-6-A	54400-IDW02-0515	7470A, 7470A	P	<2	30 mL	30 mL			
280-69513-A-6-A MS	54400-IDW02-0515	7470A, 7470A	P	<2	30 mL	30 mL	1.5 mL		
280-69513-A-6-A MSD	54400-IDW02-0515	7470A, 7470A	P	<2	30 mL	30 mL	1.5 mL		

Batch Notes

Hydroxylamine Hydrochloride Lot	143410-04/27
Sulfuric Acid Lot Number	102195-04/29
Lot # of hydrochloric acid	88821-4-20
Lot # of Nitric Acid	104736-4-27
Hot Block ID number	14
Potassium Persulfate Lot Number	105006-04/29
Potassium Permanganate Lot Number	149037-05/07
NaCl Lot #	142334-04/13
Oven, Bath or Block Temperature 1	94 Celsius
Oven, Bath or Block Temperature 2	95
Pipette ID	MET70
Stannous Chloride Lot Number	106369-05/26
SOP Number	DVMT0017
ID number of the thermometer	300491
Digestion Tube/Cup Lot #	1501179
Visual ck - digestate F.V. consistency	YES-F.V.CKD

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

7470A

Page 1 of 1

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-69513-1

SDG No.: _____

Project: GSI - McConnell Air Force Base, Kansas

Client Sample ID
54400-IDW01-0515
54400-IDW02-0515

Lab Sample ID
280-69513-5
280-69513-6

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG ID.:

Matrix: Solid

Date Sampled: 05/19/2015 16:30

Reporting Basis: WET

Date Received: 05/20/2015 08:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ignitability	NO				No Unit				1 7.1.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: 54400-IDW01-0515

Lab Sample ID: 280-69513-5

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 05/19/2015 16:30

Reporting Basis: WET

Date Received: 05/20/2015 08:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
pH adj. to 25 deg C	8.54	0.100	0.100	0.100	SU			1	9045D

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 54400-IDW02-0515

Lab Sample ID: 280-69513-6

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG ID.:

Matrix: Solid

Date Sampled: 05/19/2015 16:35

Reporting Basis: WET

Date Received: 05/20/2015 08:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ignitability	NO				No Unit				1 7.1.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: 54400-IDW02-0515

Lab Sample ID: 280-69513-6

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 05/19/2015 16:35

Reporting Basis: WET

Date Received: 05/20/2015 08:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
pH adj. to 25 deg C	8.48	0.100	0.100	0.100	SU			1	9045D

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Analyst: NAS Batch Start Date: 05/30/2015

Reporting Units: SU Analytical Batch No.: 279661

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	11:24	pH adj. to 25 deg C	7.030	7.00	100	97-102		pH 7.0 ICV_00059
15	CCV	11:24	pH adj. to 25 deg C	7.010	7.00	100	97-102		pH 7.0 Buffer 00138
26	CCV	11:27	pH adj. to 25 deg C	7.010	7.00	100	97-102		pH 7.0 Buffer 00138

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.: _____

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 279661 Date: 05/30/2015 11:24											
9045D	LCS 280-279611/1- A	pH adj. to 25 deg C	7.020	SU		7.00	100	97-103	LCS Source: pH 7.0 Buffer_00138		

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - SOLUBLE

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: 9045D

LOQ Date: 11/01/2009 00:00

Leach Method: DI Leach

Analyte	Wavelength/ Mass	LOQ (SU)	
pH adj. to 25 deg C		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - SOLUBLE

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: 9045D

XRL Date: 12/07/2009 19:08

Analyte	Wavelength/ Mass	XRL (SU)	
pH adj. to 25 deg C		0.1	

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver

Job Number: 280-69513-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: 7.1.2

LOQ Date: 11/01/2009 00:00

Analyte	Wavelength/ Mass	LOQ (NONE)	
Ignitability			

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.:

Instrument ID: NOEQUIP Method: 9045D

Start Date: 05/30/2015 11:24 End Date: 05/30/2015 11:27

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.:

Instrument ID: NOEQUIP Method: 9045D

Start Date: 05/30/2015 11:24 End Date: 05/30/2015 11:27

Prep Types

S = Soluble

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-69513-1

SDG No.: _____

Instrument ID: NOEQUIP Method: 7.1.2

Start Date: 05/27/2015 20:48 End Date: 05/27/2015 20:48

Lab Sample ID	D / F	T Y p e	Time	Analytes															
				I g n															
280-69513-5	1	T	20:48	X															
280-69513-6	1	T	20:48	X															

Prep Types

T = Total/NA



THE LEADER IN ENVIRONMENTAL TESTING

Calibration and Maintenance Log

Wet Chemistry / pH Probe

Denver

Daily Maintenance	Day	Sat	Sun	Mon	Tue	Wed	Thu	Fri
(No maintenance required when instrument is not in use.)	Date/Time:	05/30/15						
	Analytic:	015						
1) Inspect the probe for scratches or cracks.		—						
2) Probe solution refilled.		—						
3) Store probe in storage solution.		—						
4) Wipe off apparatus and clean up any spills.		—						
	2.0 Buffer Lot #:	00034						
	Expiration Date:	12/31/16						
	4.0 Buffer Lot #:	00119						
	Expiration Date:	05/30/15						
	7.0 Buffer Lot #:	00138						
Calibration Standards:	Expiration Date:	03/31/17						
	10.0 Buffer Lot #:	00097						
	Expiration Date:	04/30/16						
	12.0 Buffer Lot #:	00082						
	Expiration Date:	12/31/15						
	Calibration Slope:	100.9						

Additional Maintenance/Comments:

Wet Chemistry Data Review Checklist Direct Measurement Methods (pH, Conductance, etc.)					
Method(s): 9040B/DLLECH	Instrument: pH/rh	SOP #: WC-0001	Analyst: NS		
Rn Date: 053015	Prep Batch(s): AF 279611	Analytical Batch: 29661			
A. Calibration/Instrument Run QC			Yes	No	
Was the instrument properly standardized?					
Second-source ICV analyzed immediately after instrument standardization & recovery ± 10% of true value?				/	
ICB analyzed immediately after ICV & results < the RL?				/	
CCV analyzed after every ten samples & recovery ± 10% of true value?				/	
CCB analyzed after every CCV & all results < the RL?				/	
B. Sample Results					
pH sample and duplicate within ± 0.1 units?				/	
Are all sample dilutions appropriate and do associated RLs reflect required dilutions or limited sample volumes?				/	
All reported results bracketed by in control CCV results?				/	
Sample analyses done within holding time? If no, create HTV NCM. NCM #				/	
Preparation benchsheet completed and included in package (if applicable)?				/	
Special client requirements reviewed and met?				/	
Was data manually transcribed from instrument printouts into TALS verified 100% including dilution factors, significant figures and correct units? (if Applicable)				/	
Do the prep and analysis dates in TALS reflect the actual dates?				/	
STD/True Value information is updated and included?				/	
C. Preparation/Matrix QC					
Method blank < ½ RL or all reported samples > 10x blank?				/	
Method blank < ½ RL or NCM provided?				/	
LCS/LCSD run for batch and within QC limits?				/	
Sample DUP run at required frequency and RPD within established limits?				/	
Menu or Tab	Check			1 st	2 nd
Analyst Desktop	Create or open batch				/
View Batch Info	Confirm all fields are populated			/	/
	Edit Analyst ID as is appropriate			/	/
Run log	Verify the correct samples and QC are run at the correct frequency (i.e., 10 samples per CCV)			/	/
Sample List	If prompted to process samples, select "Yes"			/	/
	Confirm samples are identified (Blue P Icon)			/	/
	Confirm correct analysis date and time are listed			/	/
	Confirm samples have the correct dilution factors			/	/
	Confirm samples have the correct method chain assigned			/	/
	Confirm that solid samples have the % moisture listed			/	/
Worksheet	Populate all appropriate fields in the worksheet. Initial amount, final amount, pH, etc.			/	/
Reagents	Confirm reagents are correct and properly associated with QC samples. Confirm that reagent amounts are correct. If reagents are new verify that the correct COA has been attached to the source standard			/	/
				/	/
Results	Check for special instructions (Login, Method and Sample comments) - red notebook icon			/	/
	Check for any QC failures			/	/
	Set status for samples based on QC and sample results info (i.e., set to primary analysis with passing QC or reject samples without passing QC or samples that are over-range)			/	/
	Address any results that are reported without passing QC with an NCM			/	/
QC Links	Confirm QC links are correct			/	/
Hist. Data Check	Check historical data. Print charts for outliers. Take corrective action as is appropriate			/	/
Sample List	Re-calculate data and set to appropriate review status (1 st or 2 nd level review)			/	/
	Scan and attach raw data & save batch			/	/
Analyst: <i>Nicole L. Lutz</i>	Date: 053015	Analyst Comments:			
2nd Level Reviewer: <i>LB</i>	Date: 01/115	Reviewer Comments:			

Wet Chemistry Data Review Checklist Direct Measurement Methods (pH, Conductance, etc.)				
Method(s): 7, 1, 2, 16NITE	Instrument: N/A	SOP #: DV-WC-0063	Analyst: Muooneye	
Rn Date: 5/27/15	Prep Batch(s): N/A		Analytical Batch: 279256	
A. Calibration/Instrument Run QC			Yes	No
Was the instrument properly standardized?			/	/
Second-source ICV analyzed immediately after instrument standardization & recovery ± 10% of true value?			/	/
ICB analyzed immediately after ICV & results < the RL?			/	/
CCV analyzed after every ten samples & recovery ± 10% of true value?			/	/
CCB analyzed after every CCV & all results < the RL?			/	/
B. Sample Results				
pH sample and duplicate within ± 0.1 units?			/	/
Are all sample dilutions appropriate and do associated RLs reflect required dilutions or limited sample volumes?			/	/
All reported results bracketed by in control CCV results?			/	/
Sample analyses done within holding time? If no, create HTV NCM. NCM #			/	/
Preparation benchsheet completed and included in package (if applicable)?			/	/
Special client requirements reviewed and met?			/	/
Was data manually transcribed from instrument printouts into TALS verified 100% including dilution factors, significant figures and correct units? (If Applicable)			/	/
Do the prep and analysis dates in TALS reflect the actual dates?			/	/
STD/True Value information is updated and included?			/	/
C. Preparation/Matrix QC				
Method blank < ½ RL or all reported samples > 10x blank?			/	/
Method blank < ½ RL or NCM provided?			/	/
LCS/LCSD run for batch and within QC limits?			/	/
Sample DUP run at required frequency and RPD within established limits?			/	/
Menu or Tab	Check		1st	2nd
Analyst Desktop	Create or open batch		/	/
View Batch Info	Confirm all fields are populated		/	/
	Edit Analyst ID as is appropriate		/	/
Run log	Verify the correct samples and QC are run at the correct frequency (i.e., 10 samples per CCV)		N/A	N/A
	If prompted to process samples, select "Yes"		/	/
Sample List	Confirm samples are identified (Blue P icon)		/	/
	Confirm correct analysis date and time are listed		/	/
	Confirm samples have the correct dilution factors		/	/
	Confirm samples have the correct method chain assigned		/	/
	Confirm that solid samples have the % moisture listed		N/A	N/A
	Populate all appropriate fields in the worksheet. Initial amount, final amount, pH, etc.		/	/
Worksheet	Reagents		Confirm reagents are correct and properly associated with QC samples. Confirm that reagent amounts are correct. If reagents are new verify that the correct COA has been attached to the source standard	
	Check for special instructions (Login, Method and Sample comments) - red notebook icon		/	/
Results	Check for any QC failures		/	/
	Set status for samples based on QC and sample results info (i.e., set to primary analysis with passing QC or reject samples without passing QC or samples that are over-range)		/	/
QC Links	Address any results that are reported without passing QC with an NCM		/	/
	Confirm QC links are correct		/	/
Hist. Data Check	Check historical data. Print charts for outliers. Take corrective action as is appropriate		/	/
Sample List	Re-calculate data and set to appropriate review status (1 st or 2 nd level review)		/	/
	Scan and attach raw data & save batch		/	/
Analyst:	Date: 5/27/15	Analyst Comments:		
2nd Level Reviewer:	Date: 5/28/15	Reviewer Comments:		

Ignitability of Solids for Waste Characterization Per 40 CFR 261.21

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Denver

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 279611

Batch Start Date: 05/29/15 18:02

Batch Analyst: Simons, Nicole A

Batch Method: DI Leach

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
LCS 280-279611/1		DI Leach, 9045D		40.11 g	40 mL				
280-69513-A-5	54400-IDW01-0515	DI Leach, 9045D	S	40.21 g	40 mL				
280-69513-A-6	54400-IDW02-0515	DI Leach, 9045D	S	40.06 g	40 mL				

Batch Notes

Balance ID	P602036023
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Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-69513-1

SDG No.:

Batch Number: 279661

Batch Start Date: 05/30/15 11:24

Batch Analyst: Simons, Nicole A

Batch Method: 9045D

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	pH 7.0 Buffer 00138	pH 7.0 ICV 00059		
ICV 280-279661/1		9045D		1 mL	1 mL		1 mL		
LCS 280-279611/1-A		9045D				1 mL			
CCV 280-279661/15		9045D				1 mL			
CCV 280-279661/26		9045D				1 mL			

Batch Notes

pH Buffer 1 ID	pH2buffer_00034
pH Buffer 2 ID	pH4buffer_00119
pH Buffer 3 ID	pH7buffer_00138
pH Buffer 4 ID	pH10buffer_00097
pH Buffer 5 ID	pH12buffer_00082
pH Buffer 6 ID	ICV_00059
Calibration Date and Time	053015
Electronic Slope	100.9
Instrument ID	Orion Five Star
Sufficient volume for sample dup	yes
ID number of the thermometer	QX1-15909

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

9045D

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Shipping and Receiving Documents

TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002
Phone (303) 950-0100 Fax (303) 431-7171

Chain of Custody Record

Client Contact: Anna Zabierek

Company: GSI Environmental, Inc

Address: 9600 Great Hills Trail, Ste 350E

City: Austin

State, Zip: TX, 78759

Phone: 512-346-4474(Tel)

E-mail: alw@gsi-net.com

Project Name: GSI - McConnell Air Force Base, Kansas

Site:

Sampler:

Phone:

E-Mail:

Lab PM:

Job #:

FedEx #:

Page:

Page:

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Job #: 3969-211

COC No:
THE LEADER IN ENVIRONMENTAL TESTING

280-69513 Chain of Custody

TAT Requested (days):

Standard TAT (except noted)

POT#:

Purchase Order Requested

WO #:

Project #:

28013169

SSOW#:

Field Filtered Sample (Yes or No)

Perform MS/MSD (yes or No)

Matrix (Water, Solid, Oil, Bitumen, As-Air)

Preservation Code:

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Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 280-69513-1

Login Number: 69513

List Source: TestAmerica Denver

List Number: 1

Creator: White, Denise E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	